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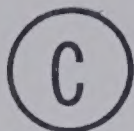
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ATTITUDE CHANGE IN MANAGEMENT DEVELOPMENT PROGRAMS

by



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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Attitude Change in Management Development Programs" submitted by Charles M. Lockwood in partial fulfillment of the requirements for the degree of Master of Business Administration.

ABSTRACT

An important input into the organizational system is the management development process. This thesis develops a systems model of part of the management development process which includes as inputs the attitudes held by management staff, the development programs aimed at changing attitudes as part or all of their objective and the existing organizational environment. Outputs considered are changes in attitudes which could lead to changes in managerial job performance and ultimately organizational outputs.

The empirical work described is a test of a particular educational process to determine if it results in attitude change. A group of 69 management development students (these were lower and lower-middle management practitioners taking a 50-hour evening course) were tested using questionnaires developed by Edgar Schein and Rensis Likert. The Schein questionnaire turned out to be too general for this particular situation, but Likert's turned out some significant results.

The Likert questionnaire measured student attitudes on seven scales with higher scores indicating a preference for styles of management which are democratic and participative in the sense that subordinates are involved to the greatest possible degree. The following changes were recorded:

Scale

Significant positive changes	- Leadership Processes Used Character of Decision-Making Process
Significant negative changes	- Character of Motivational Forces Character of Control Processes
No significant changes	- Character of Communication Process Character of Interaction-Influence Process Character of Goal Setting or Ordering

These results did not support the hypothesis that attitudes will change in a particular direction, but they did demonstrate that such programs can achieve attitude change.

ACKNOWLEDGEMENTS

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CHAPTER 1

THEORETICAL OUTLINE

1.1 Introduction

The purpose of this thesis is to study the change of attitudes which may take place when individuals are exposed to university management development programs. Much attention has been paid to evaluating participants' reactions to management development programs (i.e., whether they like it) and also to measuring the amount of knowledge that may have been learned. Very little work seems to have been done to determine whether these programs have had an effect on the individual's attitude toward management. The initial discussion in this thesis consists of a review of the need for management development and a description of the process itself. Problems of evaluation are also dealt with and finally an empirical test to measure attitude change in a particular situation is reported.

1.2 Management Development

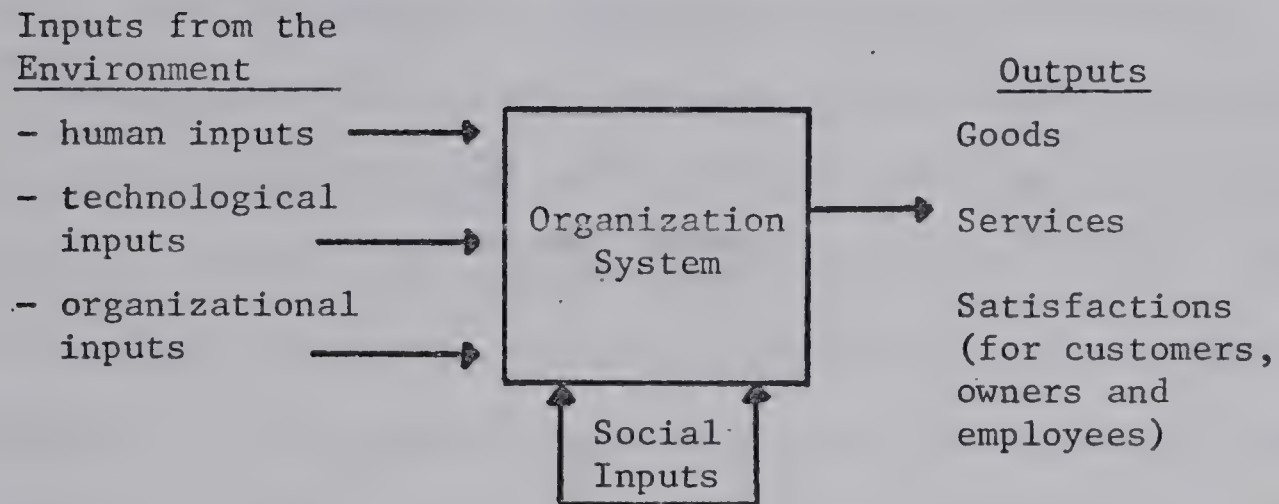
A useful concept when trying to understand organizations and their problems is the systems approach of John Seiler.¹ He visualizes organizations as open systems operating in a contemporary social environment. In a sense they are subsystems in the greater social system which comprises our society. Exhibit 1.1 is a general illustration of the Seiler model. A successful organization is one which produces a mix of outputs which result in it being perpetuated. These outputs will include goods and/or services and satisfactions. Not only must customers and owners be satisfied, but the members of the organization must obtain

¹J. Seiler, Systems Analysis in Organizational Behavior
(Homewood: Richard D. Irwin, Inc., 1967)

both the economic and psychological rewards that will motivate them to maintain their membership. To produce outputs, each organization must

EXHIBIT 1.1

AN ORGANIZATION SYSTEMS MODEL



have the proper balance of inputs. The model illustrated in Exhibit 1.1 visualizes three classes of inputs. Human inputs are the individuals who become members of the organization, bringing with them their stores of education, experience, abilities and attitudes. Technological inputs include both the ideas and physical facilities needed to produce the goods and services which form part of the organization's output. Organizational inputs are the theories and ideas employed to enable the organization to combine human and technological inputs and produce outputs. For example, they include those theories which underlie the traditional management functions of planning, organizing, assembling resources, directing and controlling. It can be readily seen that each of the three basic inputs are interdependent. For one thing, technology being employed can control, to a major extent, the human inputs required and the form of structure used. Social inputs emerge within the system from the interaction of the other three inputs. If these latter have a bad "fit", social inputs will develop which are dysfunctional in terms of

organizational goal attainment. A change in technology requiring a skilled employee to move to a highly specialized job where his activities were very much programmed to fit a machine cycle could alienate him from the organization. His new work would not provide him with opportunities to fill his higher needs and his level of motivation would fall.

This model highlights the importance of management development. Technology is rapidly changing and organizations are having to introduce changes in this input at increasingly more frequent intervals. These changes are dictating the use of new management systems and effecting the structure of the organization and the styles of leadership required. The environment in which management people within the organization find they are working is, therefore, subject to frequent and major changes. They have to be willing and able to adapt so that two things can be accomplished:

(1) Technological and organizational inputs must be planned so that they match to the greatest degree possible the organization's human resources.

(2) Management must adapt to the changes that are necessary and give leadership to other members of the organization which will enable them to change and meet new demands on their abilities.

An organization's management development program has the responsibility of upgrading and changing its human resources. As the tempo of change increases this function becomes more important and more urgent. Management development has been defined as "any attempt to improve managerial effectiveness through a planned and deliberate learning process."²

²A. C. Filley and R. J. House, Managerial Process and Organizational Behavior (Glenview: Scott Foresman and Co., 1969), p. 422.

There are many approaches which can be taken to try to effect this improvement: on-the-job coaching, counselling, appraisal, classroom training, job rotation, selected reading, planned experience and the use of understudy positions. All of these have, as their ultimate objective, the improvement of managerial performance. Schein³ emphasises learning to be a manager, like learning any profession, is a process of acquiring (a) a certain body of knowledge, (b) skills in implementing this knowledge, and (c) the attitudes and values that define how and when and for what ends the knowledge and skills are to be used. To understand the process fully one must consider all three aspects. Traditionally, a good deal of attention has been given to measuring changes in knowledge levels and skills, but little has been done to determine how much attitudes are effected by various development programs.

Exhibit 1.2 is a systems model which describes the management development process in terms of inputs and outputs. The model recognizes that the basic inputs into the management development system are the individual members of the managerial team and the various development programs that may be undertaken. The third input is the organizational environment within which the management team must operate. There should be three immediate outputs from a development program: increased knowledge, increased skill and changed attitudes. The real payoff in terms of management development comes when there are positive changes in managerial performance and organizational outputs. The model assumes that this will only follow when there are immediate outputs in the right proportion to meet the development needs of the situation.

³E. H. Schein, "Attitude Change During Management Education," Administrative Science Quarterly, Vol. II, Number 4 (March, 1967), pp. 601-628.

EXHIBIT 1.2

SYSTEMS MODEL OF THE MANAGEMENT DEVELOPMENT PROCESS

<u>Inputs</u>	<u>Immediate Outputs</u>	<u>Final Outputs</u>
1. The organization's management inventory.	1. Knowledge; change in level of information individual understands, is aware of, and is capable of verbalizing.	1. Change in managerial job performance.
2. The management development program.		
3. The organizational environment—structure, leadership style, predispositions of organizational members, objectives.	2. Change in skills of implementing this knowledge.	↓
	3. Change in attitudes and values that define how and when and for what ends the knowledge and skills are to be used.	2. Change in organizational outputs.
4. Outside environment—economic trends, social changes, state of technology.		

There is no doubt that in many cases individual management people may benefit from positive outputs at the immediate level, but they may not be in the correct proportions to improve managerial performance. For example, a manager's knowledge about the theory of communication systems may be greatly increased by his participation in a seminar or by a coaching session. If, however, his own attitude is such that he will not adapt or apply back on the job the knowledge that he has learned, the process will have no effect on organizational outputs.

In this connection Katz⁴ expresses the view that there are five basic requirements if a person's job behavior is going to change:

- (1) he must want to improve,

⁴R. Katz, "Human Relations Skills Can Be Sharpened", Harvard Business Review (July-August, 1956).

- (2) he must recognize his own weaknesses,
- (3) he must work in a permissive climate,
- (4) he must have help from someone who is interested and skilled,
- (5) he must have an opportunity to try out new ideas.

Some of these factors relate to the attitude of the individual (1 and 2), while others (3, 4 and 5) depend on the organization's climate. Inasmuch as climate depends on the attitude of management as a whole, though, it can be said that the question of attitude is a key to changes in individual job behavior. Hence the importance of determining whether management development programs result in attitude change.

Schein⁵ builds a theory of management development based primarily on attitude change. He feels that adequate managerial performance at higher levels is at least as much a matter of attitude as it is a matter of knowledge and specific skills, and that the acquisition of such knowledge and skills is itself in part a function of attitudes. And yet, he admits far more attention has been given to the psychology which underlies change in the areas of knowledge and abilities than to the psychology which underlies changes in attitudes. His model of attitude change involves three basic steps:

i) Unfreezing. This step is based on the assumption that a majority of managers who are being "developed" are not ready or able to change in the manner in which their organization might desire. In a sense, their psychological state must be changed before they can be influenced. The organization is, of course, in a position to practice

⁵E. H. Schein, "Management Development as a Process of Influence", Industrial Management Review (May 1961), pp. 59-77.

a certain amount of coercion. For one thing, most managers aspire to higher level positions in the hierarchy so they will be motivated to meet management's criteria for promotion. Management's development plan for them will have an important influence on their behavior. The plan may, of course, require a drastic revision of thinking on their part. The unfreezing process may be greatly aided by such things as physical removal from the work (and home) environment, removal of social supports for old attitudes and communication of the relation of positive rewards to change.

ii) Changing. Once the manager has made up his mind that he wants to change, his attitudes can be influenced in two ways. He may simply accept the attitudes expected by the organization in the form that they are explained by someone in the learning situation, for example, the teacher or boss. Alternatively he may be faced with experimental situations the solutions of which will require that he work out and adopt a new set of attitudes. Actually the change process will probably contain elements of both identification (accepting the attitudes of others) and internalization (discovering new and workable attitudes on one's own).

iii) Refreezing. The full integration of changed attitudes into the manager's personality demands a degree of social support back on the job. The manager who is influenced to change from a directive leadership pattern to one which is more participative will very quickly change back if he is returned to a job environment that is not supportive. This is particularly true if the change process has involved only identification rather than internalization.

Exhibit 1.3 is a model of the attitude change portion of a

management development program. It could actually be regarded as a subsystem of the model in Exhibit 1.2.

EXHIBIT 1.3

SYSTEMS MODEL OF THE MANAGEMENT DEVELOPMENT PROCESS

(Considering Attitude Change Only)

<u>Inputs</u>	<u>Immediate Outputs</u>	<u>Final Outputs</u>
1. Attitudes held by management staff.		Change in managerial job performance (leading to)
2. Development programs aimed at changing attitudes as part or all their objective.	Change in attitudes and values that define how, when and for what ends knowledge and skills are to be used.	↓
3. The existing organizational environment—structure, leadership style, predispositions of organization members.		Change in organizational outputs.
(Processes)		
Unfreezing and start of change.	Change.	Only successful if changed attitudes applied—refreeze.

The inputs control the unfreezing and the start of the change process. A successful development program will have to take into account existing management attitudes as well as the organizational environment. These two inputs will have an important influence on the type and intensity of the unfreezing process that will have to be used. The immediate output of the change process should be a change in attitudes. The final payoff comes, of course, when changed attitudes result in improved managerial job performance and increased outputs. This takes place over time and will only happen if a refreezing has

taken place which gives a degree of permanence to the new attitudes.

Any testing of the Exhibit 1.3 model has to be in two steps. The first would be designed to show whether the development program resulted in a change in attitude on the part of those people exposed to it. This checking to determine what, if any, were the immediate outputs can be fairly well controlled, and instruments are available to carry out such a task. Step two, the determination of changes in final output, is more difficult. The ultimate goal is an increase in organizational outputs and these can be readily measured. The difficulty lies in attributing these changes to any particular cause since there are so many variables effecting them.

1.3 Evaluation of Management Development

The Training and Development Handbook⁶ suggests that in evaluation of management development programs four types of results have usually been measured.

1. Reaction. This tests how well the participants liked the program. The popularity of a program may have an influence on future attendance, but it does not assure that there has been any kind of learning.

2. Learning. This attempts to ascertain the principles, facts and techniques that people involved in the program have learned. It measures changes in knowledge and changes in skills.

3. Behavior. An attempt to ascertain what changes in on-the-job behavior have resulted from involvement in the program.

⁶R. L. Craig and L. R. Bittel, Ed., The Training and Development Handbook (sponsored by the American Society for Training and Development, New York: The McGraw-Hill Book Company, 1967), Ch. 5.

4. Results. An examination of the tangible results in terms of improved quality, quantity and reduced costs of the organization's outputs.

Measures 3 (behavior) and 4 (results) are clearly aimed at evaluating the final outputs of changes in managerial behavior and changes in organizational outputs. Normally, though, there will be a time delay of anywhere from three months to two years between management development inputs and final outputs. These changes in final outputs, when they do come, are usually recorded in the traditional reports of an organization's activity, for example, profit and loss statements, cost reports, comparisons with budget, units of goods or services produced, employee turnover, quality control reports, absenteeism, etc. While such sources give clear indications of when there are changes in performance, it is usually impossible, because of the time delays previously mentioned, to attribute them to changes in specific independent variables such as the input of a management development program.

One apparently successful analysis of this type was done by Thomas, Moxham and Jones⁷ in which they compared the total cost of training in an organization with the benefit that it realized from the program. They present a very detailed classification of the costs of training including such things as initiating the training function, giving instruction and trainees' wages. Three main benefits are quantified:

- (1) Change in average performance levels.
- (2) Change in retention time (turnover).

⁷B. Thomas, J. Moxham and J.A.G. Jones, "The Cost Benefit Analysis of Industrial Training", British Journal of Industrial Relations, Vol. VII, No. 2 (July, 1969), p. 45.

(3) Change in the length of training period (i.e., steepness of learning curve).

They concluded that costs and benefit can be measured and compared. These results indicated that 25 per cent of the benefits of improved training were due to higher output performance and 75 per cent of benefit accrued from lower turnover. The authors point out that the organization keeps all of this benefit while frequently having to share the additional output with the workers in the form of higher wages.

This example applies to operator training and is only mentioned to point out that progress is being made in the area of putting dollars and cents values on the educational inputs going into organizations.

The model in Exhibit 1.2 suggests that changes in final outputs are the end result of changes in immediate outputs. That is, after some time interval we can expect desired changes in managerial behavior if we can achieve lasting changes in the level of knowledge and the level of skills and changes in attitudes. These immediate changes are leading indicators of changes in managerial behavior and, ultimately, organizational outputs. This is a concept which is supported by Likert⁸ when he links what he calls intervening variables to end result variables. His intervening variables are such factors as attitudes, motivations and cognitive understanding, while end result variables are the traditional measure of organizational performance. His research indicates that there is a positive correlation between these two variables, with changes in end result variables following changes in intervening variables after the lapse of time. This lends some support to the contention

⁸ Rensis Likert, The Human Organization (New York: The McGraw-Hill Book Co., 1967), p. 26.

in Exhibit 1.2 that there is a relation between those things listed as immediate outputs and the changes in organizational outputs noted under the final output column. This is also supported by Porter and Lawler⁹ in their study of the relationship between attitudes and behavior. This point of view underlies a research project reported by Herzberg, Mausner and Snyderman¹⁰ in which their literature research led them to the conclusion that a relationship exists between job attitudes and output or productivity. Further studies to detail the relationship between these variables are desirable, but for the purposes of this paper I wish to assume that a positive correlation exists.

The main thrust of this thesis is the examination of the problem of accomplishing and evaluating attitude change resulting from management development program inputs. The other two immediate outputs listed in Exhibit 1.2, changes in knowledge and skill levels, will be bypassed because they have traditionally been measured in a fairly satisfactory manner through the use of various tests and objective observations of on-the-job technical abilities.

1.4 Attitudes and Measuring Their Changes

Let us look at ways to test the relationship between inputs and immediate outputs in Exhibit 1.3. This portion of Exhibit 1.3 is reproduced as Exhibit 1.4.

The term attitude is used by social psychologists to mean a relatively enduring organization of beliefs pertaining to an object or

⁹L. W. Porter and E. E. Lawler, Managerial Attitudes and Performance (Homewood: Richard D. Irwin, Inc., 1968), Ch. 9.

¹⁰Frederick Herzberg, Bernard Mausner and Barbara Snyderman, The Motivation to Work (New York: John Wiley and Sons, Inc., 1959), p. 8

a situation, predisposing one to respond in some preferential manner.

EXHIBIT 1.4

A SUBSYSTEM IN THE MANAGEMENT DEVELOPMENT PROCESS

<u>Inputs</u>	<u>Immediate Outputs</u>
1. Attitudes held by management staff.	
2. Development programs aimed at changing attitudes as part or all their objective.	Changes in attitudes and values that define how, when and for what ends knowledge and skills are to be used.
3. The existing organizational environment—structure, leadership style, predispositions of organization members.	

All attitudes incorporate beliefs, but not all beliefs are in attitudes.

A person's attitude will lead to some sort of preferential response.¹¹

Hichman¹² sees the attitudes of people as verbal statements which constitute blueprints for behavior. Such verbal statements indicate "the ends toward which action is directed, the justification for holding these ends or values, the proper methods for achieving the ends and the proper feeling and evaluation regarding degrees of success or failure in achieving ends." Murphy and Likert¹³ have referred to attitudes as verbal substitutions for overt action. They are significant determinants of behavior, although, of course, they may not at a given time be

¹¹Milton Robach, Beliefs, Attitudes and Values (San Francisco: Jassey Bros. Inc., 1968), Ch. 5.

¹²C. A. Hichman, American Economic Review (Vol. XLV, 1955), pp. 544-554.

¹³G. Murphy and R. Likert, Public Opinion and the Individual (New York: Russell and Russell, 1938), p. 28, p. 53.

reflected in actual behavior.

Thurston and Chave's¹⁴ concept is that attitudes are "the sum total of man's indications and feelings, prejudices and biases, pre-conceived notions, ideas, fears, threats and convictions about any specific topic....it is, admittedly, a subjective and personal affair." They see the verbal expression of an attitude as an opinion and feel that opinions can be used as the means for measuring attitudes. Their methods of measurement are based on a subject's acceptance or rejection of various opinions.

Because attitudes themselves may not be demonstrated by observable behavior, we must depend on some questioning procedure to determine people's attitudes. In most cases this must take the form of questionnaires, although in some studies information about people's attitudes might be learned during face-to-face interviews. In either case, the validity of the study depends on obtaining the honest cooperation of the subject—a problem not to be taken lightly in this age of questionnaires.

What attitudes do we consider to be important in the field of management development, or what kinds of attitudes are important to managers? Schein¹⁵ suggests a general hypothesis about the specific content of attitudes and values that managers should possess. "Managers must probably value the announced goals of the organization, have a sense of responsibility to subordinates, customers and stockholders,

¹⁴L. L. Thurston and E. J. Chave, The Measurement of Attitude (Chicago: The University of Chicago Press, 1928).

¹⁵E. H. Schein, "Management Development as a Process of Influence", Industrial Management Review (May 1961), pp. 59-77

and trust people enough to delegate responsibilities and duties to them. To rise from middle to top management, one probably must be able to give up loyalties to a particular function in the organization and develop a perspective toward the total organization, have a sense of responsibility toward the community in which the organization functions, and value profit and the survival of the organization." To measure shifts in these attitudes Schein uses an Opinion Questionnaire which asks the manager to express his degree of agreement or disagreement with belief or value statements relating to the following areas:

1. Business in Society
 - Management-labour relations.
 - Business-government relations.
 - Corporate responsibility.
 - Relations to society.
2. General Cynicism
 - The manager's outlook toward how he should discharge his responsibilities, his ethics and morals.
 - The organization's responsibilities toward its employees.
3. Management Theory
 - Classical management theory.
 - General conservatism.
 - Change and "cosmopolitanism".
4. Attitudes Toward People and Groups
 - Faith in workers.
 - Belief in group incentives.
 - Belief in group decision making.
 - Interpersonal orientation.
5. Individual-Organizational Relations
 - Right to privacy.
 - Cynicism about how to get ahead.
 - Cynicism about conformity pressures.
6. Miscellaneous
 - Specialization versus general skills.
 - Management beliefs.
 - Corporate size.

The complete questionnaire used by Schein is attached as Appendix I.

In the study presently referred to, Schein used his questionnaire to measure the differences in attitudes between graduate students in a Master's program, practicing middle level executives attending a one-year program, and practicing senior executives involved in a ten-week program. This comparison between groups was an important aspect of the study, but for our present purpose its use to measure change in the individual groups is of more interest. The questionnaire was administered both before and after the educational programs so that effects on attitudes could be measured. Little, if any, change was recorded in the responses under Business and Society and General Cynicism. In the area of Management Theory changes were recorded indicating that the participants at the end of the training believed less in classical management theory, were less conservative, and believed less in the value of stability and low career movement. Attitudes toward people also recorded a change. Faith in workers increased; there was more interest in group incentives and group decision making; and there was an increase in interpersonal orientation (interdependence). Changes were recorded, too, in individual-organization relationships. There was increased belief that employees should have a right to privacy; there was more cynicism about how to get ahead and about pressures to conform.

This instrument appears, therefore, to be a tool which can be used to measure the effects of management development programs on the attitudes of managers. It has the advantage of not only covering a broad range of attitudes, but also due to its grouping permitting the researcher to have a separate look at attitudes in specific areas.

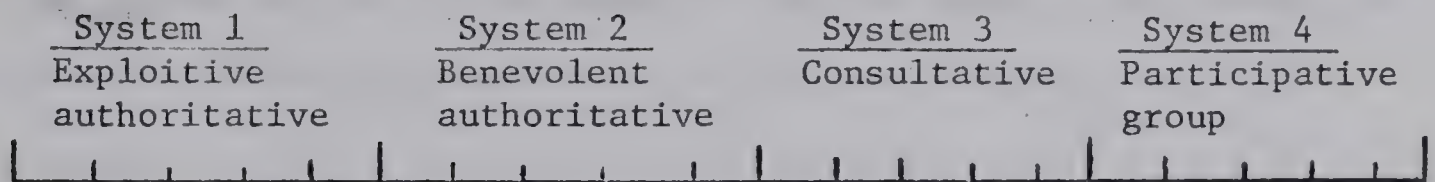
Another approach to measuring attitude change can be based on

the work of Likert as discussed in two of his books.^{16, 17} His work has been directed chiefly at defining management systems which are placed on a continuum as illustrated in Exhibit 1.5. He defines

EXHIBIT 1.5

LIKERT CONTINUUM

Different Management Systems



in detail each of these systems in terms of their operating characteristics under the following headings:

1. Leadership processes used.
2. Character of motivational forces.
3. Character of communication process.
4. Character of interaction-influence process.
5. Character of decision-making process.
6. Character of goal setting or ordering.
7. Character of control processes.

Table 3-1 in New Patterns in Management presents Organizational and Performance Characteristics of Different Management Systems. From this Form T (Appendix II) was developed. Form T is designed to obtain a highly reliable measure of an organization's management system. Forms O and E (Appendices III and IV) were obtained by dividing Form T into

¹⁶ Rensis Likert, New Patterns in Management (New York: McGraw-Hill Book Co., 1961).

¹⁷ Rensis Likert, The Human Organization (New York: McGraw-Hill Book Co., 1967).

comparable parts. Both of these profiles define management systems but they contain different detailed statements. They are, therefore, ideal for the purpose of getting before and after measurements from the same respondents without having them complete the same questionnaire. The reader will note that on each form for all the various operating characteristics there are four different opinions suggested from which the subject may choose. These actually cover a "continuum of attitudes" going from one extreme to the other, in the way of the example in Exhibit 1.6.

EXHIBIT 1.6

SAMPLE FROM LIKERT QUESTIONNAIRE

Extent to which superiors have con- fidence and trust in subordinates	Have no confidence and trust	Have condescending con- fidence and trust (master-servant)	Substantial but not complete confidence and trust; keeps control of decisions	Complete confidence and trust in all matters
--	---------------------------------	--	--	---

It is possible to present these profiles to a subject and pose any one of a number of questions. The usual use of this questionnaire is to determine the management system employed in a particular organization. In this case the instruction given is, "On the line below each organizational variable please place an N at the point which, in your experience, describes your organization at the present time. Treat each item as a continuous variable from the extreme at one end to that at the other."¹⁸ This instruction solicits the subject's opinion about

¹⁸Profile of Organization Characteristics (mimeographed notes distributed by The Foundation for Research on Human Behavior, Ann Arbor, Michigan, 1969).

how his organization functions, but it can just as easily be reworded to find the subject's attitude toward the various statements about management contained in the Likert Profile. This can be done by using the instruction included in the profile in Appendix II. "On the line below each organizational variable place an X at the point which best describes what you feel is most characteristic of an effective management system." The response to this instruction will give a measure of the respondent's attitude toward the management characteristics in the left hand column of the profile and classify him as to where he would attempt to practice within one of Likert's four management systems. Before and after tests using the E and O profiles can be used to measure attitude changes resulting from involvement in a management development program.

CHAPTER 2

METHODOLOGY

2.1 An Empirical Test for Attitude Change

The purpose of this investigation is to study attitude change during exposure to a University Management Development Program. The empirical work is an attempt to test part of the model described in Exhibits 1.3 and 1.4. Specifically, the work is aimed at determining the effect on the attitudes of 69 lower and middle level management people of their participation in the course Business Organization and Administration. Exhibit 2.1 is a sub-model of the one in Exhibit 1.3. It shows the portion of the total model that is being tested by this study.

EXHIBIT 2.1

A. SYSTEMS MODEL OF AN ATTITUDE CHANGE ATTEMPT THROUGH USE OF A UNIVERSITY MANAGEMENT DEVELOPMENT PROGRAM

<u>Inputs</u>	<u>Output</u>
1. Sixty-nine lower and middle level managers from organizations in the Edmonton area.	1. Change in attitude between beginning and ending of course.
2. The University of Alberta, Management Development Program—specifically the 50-hour evening course in the organizational behavior area entitled "Business Organization and Administration."	
Factors:	
a) University environment for two-hours each week for 25 weeks.	
b) Cognitive material presented by lecture.	
c) Participation by student in the form of discussion, assignments and reading.	
d) Four classes, each with different instructors.	

Consider first the inputs into this system. The student body comprised 69 lower and middle level managers from organizations in the Edmonton area. Exhibit 2.2 presents a profile of these people, segregated into the various classes to which they belonged. In addition, it shows the overall characteristics of the total sample. The profile was designed to provide summary information on age, sex, education and experience of each student. The information was collected from the registration files of the Department of Extension, The University of Alberta. All the students in the sample were taking the course Business Organization and Administration as part of the Management Development Program and because of this they all had completed application forms which contained, among other things, the profile data.

This profile data is shown in Exhibits 2.2 and 2.3. The sample consisted of a group of lower level managers with a mean age of 32 years. A high percentage had a high school diploma and 39 per cent had additional postsecondary education. In addition 26, or 38 per cent, had taken other management training programs. By and large, it was an experienced group of lower management people with 48, or 69 per cent, having more than 5 years of business experience. In fact, the median amount of experience for members of the sample was more than 10 years.

As indicated in Exhibit 2.2, these students were divided among four different classes. Probably the most significant differences between these class groups were their sizes, although there were age, experience and educational differences as well. Some of these are referred to later in the discussion of the Likert questionnaire results.

The second input into this system was the educational program which the 69 students attended. The name of the course was Business

EXHIBIT 2.2

STUDENT PROFILE INFORMATION

Class	Size No.	M.	F.	Ave. Age	EDUCATION				WORK EXPERIENCE						
					BASIC			CONTINUING		Present Position				Yrs. of experience	
					(No. of students)			No. who have taken MDP courses	No. who have taken other mgt. courses	Non- supv.	First Line Supv.	Above First Line Supv.	0-3	3-5	6-10
					Incom- plete High School	High Sch. Grad	Some Post- secon- dary								
BO&A, I	6	6	0	34	0	2	3	1	1	5	0	0	0	4	2
BO&A, IV	29	19	9	34	5	14	6	3	7	19	3	3	6	5	14
BO&A, V	10	8	2	32	0	4	3	3	1	7	0	1	1	4	4
BO&A, Summer	25	19	6	29	3	14	5	3	2	16	2	4	6	6	9
TOTAL SAMPLE	69	52	17	32	8	34	17	10	12	47	5	8	13	19	29

EXHIBIT 2.3

PROFILE STATISTICS

Number with a high school diploma or more	88.5%
Number with some postsecondary education	39%
Number of females	24.5%
Number who have taken other management courses	38%
Number classed as first line supervisors	68%
Number with more than 10 years experience	42%

Organization and Administration, one of the eleven courses in the University of Alberta's Management Development Program. It comprised 50 hours of classroom work during which organizations were studied from the point of view of the behavioral scientist. Subjects in the course included interpersonal relations, small group functioning, inter-group behavior, formal and informal organizations and systems approaches to organizational behavior and analysis. A variety of instructional approaches were used including short lectures, films, discussions of readings, discussions of cases in large and small groups and presentation of material by students. Each of the classes from which the research group was drawn was taught by a different instructor, and while detailed methods may have differed, the same textbooks and course outline were used. A copy of this outline is included as Appendix V. Instructors maintained some contact with each other during the time the course was being taught, and on occasion they exchanged lectures. All students were required to hand in written assignments during the year and in addition they were given both mid-term and final examinations. The marks earned on these assignments and examinations, along with appraisal of classroom participation, formed the basis of the instructor's evaluation of each student. Essentially this evaluation was the knowledge acquired by the student during the course, and it did not reveal any substantial amount of information about attitude change. It was estimated that in addition to the 50 hours each student spent in class, they spent an additional 90 to 125 hours in home study.

2.2 Hypotheses

The purpose of the empirical testing was to determine whether the inputs into the model illustrated in Exhibit 2.1 resulted in an out-

put of attitude change on the part of the students. To achieve this two specific hypotheses were tested:

1. That participation in the course Business Organization and Administration will change students' attitudes toward the relation of the organization to society, organizational and managerial responsibilities, conservatism and theories of management, attitudes toward people and groups, and individual-organizational relationships.
2. That participation in the course Business Organization and Administration will change students' attitudes toward the desirability of using specific management styles which are consultative and participative rather than authoritarian.

The Schein and Likert questionnaires were used for testing hypotheses 1 and 2 respectively. Students in all four class groups were asked by their instructors to complete the Schein questionnaire (Appendix I) and the Likert O questionnaire (Appendix III). This was done during the first class, or in the period between the first and second class. Students were asked by their instructors to hand back their questionnaires in an envelope which had their name written on the outside. It was explained that this identification was necessary because it was planned to consider a sample in which all the students completed both pretest and post-test questionnaires. Also, it was thought that some additional research might be undertaken to determine if any correlation existed between attitude change and knowledge gained, the latter to be measured by student attainment in the regular course evaluation. Preliminary investigations showed little, if any, relation between course evaluation scores and change in attitudes as measured by

the Likert questionnaire (see Appendix VI).

The post-test was conducted during the last regular class meeting or during a portion of the examination period. All students in each of the four classes were asked to do the post-test. Exhibit 2.4 shows the number of students, by classes, who completed both the pretest and the post-test.

EXHIBIT 2.4

NUMBERS OF QUESTIONNAIRES COMPLETED

<u>Class</u>	<u>Initial regis- tration</u>	<u>Students completing pretest</u>	<u>Students completing post-test</u>	<u>Students com- pleting both pretest and post-test</u>
BO&A, I	35	12	8	6
BO&A, IV	36	34	29	28
BO&A, V	36	13	10	10
BO&A, Summer	30	26	25	25

The Schein Personal Opinion Questionnaire (see Appendix I) has 94 statements on it which are classified under the six groupings previously discussed in Chapter 1, Section 1.4, of this paper. It is scored using a Likert scale with numbers indicating various degrees of agreement or disagreement with each statement. A computer program is available which will provide a score for 19 separate scales under the six main headings. This enables statistically significant attitude changes in specific areas to be identified and analysed, e.g., changes in attitudes toward classical management theory.

The Likert profile of organizational characteristics questionnaire can be scored both graphically and numerically. A method of computer analysis using SPSS was developed by Martin Garrett (an M.B.A. student in the Faculty of Business Administration and Commerce during

1970) which handled numerical scoring of the Likert questionnaires.

Some graphical analysis was also done on the Likert responses.

CHAPTER 3

RESULTS

3.1 The Schein Opinion Questionnaire

The Schein questionnaire that was used for this study contains 94 questions. (For example, see Appendix I.) The questions are classified into six general areas or clusters and each cluster is further broken down into scales. The names of each cluster and scale are noted on page 15.

The results of the Schein questionnaire in terms of before and after scores for each scale are noted in Exhibit 3.1. The scores on this questionnaire were derived by assigning a number to each possible response:

Strong Agreement	- 1
Mild Agreement	- 2
Mild Disagreement	- 3
Strong Disagreement	- 4.

The scores were analysed using the Statistical Package for the Social Sciences (SPSS) with the 360/67 computer at the University of Alberta.¹⁹ The statistical significance tests were performed on the Remote Job Entry terminals to the 360/67 using APL.²⁰

The following is a brief summary of the subject dealt with by the various Schein Scales and the implication of low scores prepared by Garrett.²¹

¹⁹Norman H. Nie and Dale H. Bent, with C. Hadlai Hull, Statistical Package for the Social Sciences (Toronto: McGraw-Hill Book Co., 1970).

²⁰A. D. Falkoff and K. E. Iverson, APL 360: Users' Manual (International Business Machines Corporation, 1968).

²¹Robert Martin Garrett, A Comparison of Attitude Change Between M.B.A. Students at the University of Alberta and the Massachusetts Institute of Technology (University of Alberta unpublished M.B.A. Thesis, 1970), Ch. 3.

1. Management and labour relations. Low score means favouring freedom from labour intervention.
2. Business-government relations. Low score means favouring freedom from government intervention.
3. Corporate responsibility. Low score means belief in broad corporate responsibility.
4. Relations to society. Low score means low cynicism.
5. General cynicism. Low score means low cynicism about the management role.
6. Amoralism of the management role. Low score means that one can be moral as a manager.
7. Classical management theory. Low score means belief in the classical theory.
8. General conservatism. Low score means a high level of conservatism.
9. Change and cosmopolitanism. Low score means belief in the value of stability and low career movement.
10. Faith in workers. Low score means a high faith in workers.
11. Belief in group incentives. Low score means high belief in group incentives.
12. Group decision making. Low score means belief in group decision making.
13. Interpersonal orientation. Low score means high interpersonal orientation.
14. Right to privacy. Low score means that employees should not have rights to privacy.
15. Cynicism about how to get ahead. Low score means low cynicism

EXHIBIT 3.1

RESULTS OF SCHEIN QUESTIONNAIRE

Scale	\bar{x}_1	\bar{x}_2	Difference	t score
1. Management and Labour Relations (32, 57, 28*, 35*, 45*)	13.068	13.167	.099	.20
2. Business-Government Relations (1, 6, 10, 38, 53, 55, 86, 79, 81*, 92*)	26.492	26.000	-.492	.725
3. Corporate Responsibility (13, 22, 27, 69, 82)	12.733	12.864	.131	.26
4. Relations to Society (7*, 11*, 19*, 65)	11.183	11.119	-.064	.17
5. General Cynicism (26*, 28*, 40*, 41*, 42*, 45*, 46*, 74*, 76*, 32)	23.483	22.780	-.297	.40
6. Amorality of the Management Role (17*, 40*, 66*, 91*, 85*)	11.267	11.153	-.114	.22
7. Classical Management Theory (8, 34, 52, 83, 30)	9.800	9.746	-.054	.14
8. General Conservatism (4, 6, 47, 77, 86)	12.033	11.864	-.169	.34
9. Change and Cosmopolitanism (12*, 15*, 29*, 50*, 73*, 80*, 77, 30)	19.450	19.542	.092	.16
10. Faith in Workers (20, 84, 44*, 87*)	8.200	8.864	.664	1.52
11. Belief in Group Incentives (39, 63, 49)	7.100	7.458	.358	1.17
12. Belief in Group Decision Making (63, 68, 2*, 14*, 47*)	11.550	11.678	.128	.32
13. Interpersonal Orientation (75, 71, 26*)	7.150	6.932	-.118	.42
14. Right to Privacy (43, 60, 78, 54, 16*)	13.383	13.305	-.078	.59
15. Cynicism About How to Get Ahead (3*, 9*, 28*)	7.017	7.017	0	--
16. Cynicism About Conformity to Pressures (42*, 64*, 80*)	6.700	6.712	.012	.04
17. Specialization vs General Skills (33, 48, 88*)	7.933	7.932	-.001	--
18. Miscellaneous Management Beliefs (55, 56, 57, 58, 59, 61, 63, 65)	17.000	16.661	-.339	.56
19. Corporate Size (89, 36)	4.417	4.458	.041	.16

*Indicates scale for which scoring is reversed

in this regard.

16. Cynicism about conformity to pressure. Low score means low cynicism.
17. Specialization versus general skills. Low score means belief in general skills.
18. Miscellaneous management beliefs, e.g., a good manager relies on explanation and persuasion, the most important objective of a company is to sell useful products, etc. Low score indicates belief in the various items.
19. Corporate size. Low score indicates favouring large corporations over small ones.

The data summarized in Exhibit 3.1 indicates that there were no significant changes in the attitudes measured. Therefore, part one of the hypothesis stated on page 25 has been refuted. Participation by these students in the course Business Organization and Administration does not appear to have altered the attitudes they had toward the general relationships that exist between the society, the organization and the organizational members that have management roles.

Probably the negative results here are due to a combination of several reasons. Firstly, the attitudes being measured are of a general and rather philosophical nature. Many of them would be based on deep-seated values which would be well established in the minds of the students. A glance at the questions posed in the Schein questionnaire (see Appendix I) supports this view. For example, the first statement asserts that government projects cannot compete with private enterprise because they are less efficient. An individual's attitude toward this statement rests on the political and economic climate which characterises

his particular position in the social system. It is probably not logical to think that a 50-hour evening course will have any major influence on these values or the attitudes they support, especially when it is kept in mind that students being tested have an average age of 32 years and the majority have spent over 6 years working in the business community, and actually the purpose of the course was not to change these rather broad social attitudes.

In closing this discussion of the Schein questionnaire it is probably worth noting that the two scales which showed the most change were 10 (Faith in Workers) and 11 (Belief in Group Incentives). In each case the change was positive and if it was significant it would not be the change that would be expected, given the nature of the educational program. The initial study that Schein made at M.I.T. using this questionnaire also showed increases in both these particular scales.

3.2 The Likert Profile of Organization Characteristics Questionnaire

The Likert O questionnaire was used as a pretest instrument and the E questionnaire was employed for the post-test. Copies of both these questionnaires are included as Appendices III and IV. They were administered by the instructors in the manner previously described. The number completed for each class is noted in Exhibit 2.4.

Both the O and E questionnaires contain 24 statements with which the students were asked to express varying levels of agreement. They do this in the context of answering the question, "On the line below each organizational variable place an X at the point which best describes what you now feel is most characteristic of an effective management system." Exhibit 1.6 is repeated as Exhibit 3.2 to illustrate the method of scoring. The one addition in this exhibit is that the

scale has been numbered. No numbers were shown on the questionnaire scales that the students marked, but they are shown here to indicate how a numerical score was given to the responses. It should be noted again that Likert defines four management systems (see Exhibit 1.5) and his questionnaire is designed to classify responses in terms of these four systems.

EXHIBIT 3.2

SAMPLE FROM LIKERT QUESTIONNAIRE

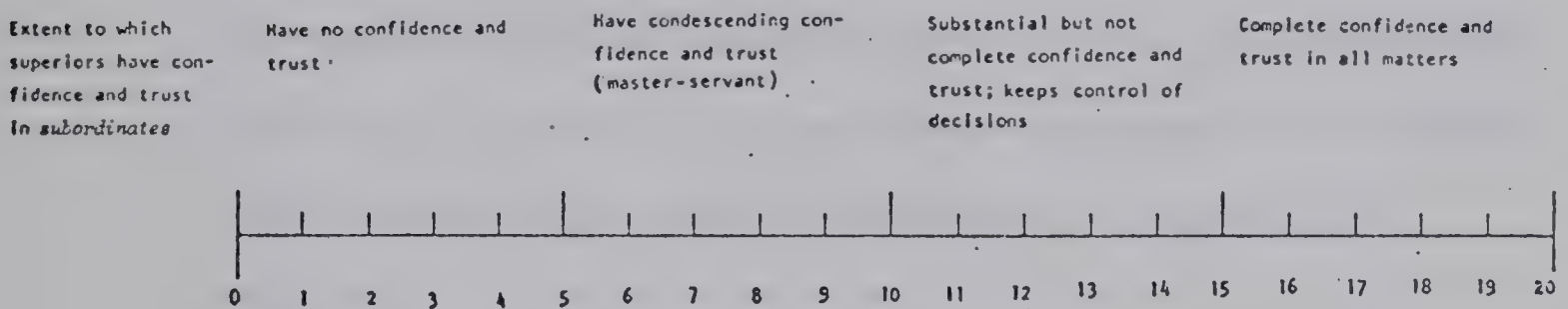


Exhibit 3.3 ties the scoring system used in this research to the Likert classification of management systems.

EXHIBIT 3.3

LIKERT QUESTIONNAIRE SCORING

<u>Likert System</u>	<u>Score Range</u>
System 1 - Exploitive, Authoritative	Between 0 and 5
System 2 - Benevolent, Authoritative	Between 5 and 10
System 3 - Consultative	Between 10 and 15
System 4 - Participative Group	Between 15 and including 20

NOTE: Using this method scores of 5, 10 and 15 clearly fall between two systems. Inasmuch as the work was aimed at detecting changes, this did not pose a problem.

The 24 statements on the E and O questionnaires are grouped together into 7 different scales, each relating to certain aspects of an individual's approach to management. Study of the questionnaires

in Appendices II and III will provide the reader with a full description of these scales. A summary is given below.

Scale 1: Leadership Processes Used

- a) Extent to which superiors and subordinates have trust and confidence in each other—score proportional to amount of trust and confidence.
- b) The degree to which superiors involve their subordinates in the problem-solving process—high score, high involvement.
- c) The amount of support superiors give to their subordinates and the amount of openness that exists in the superior-subordinate relationship—high score, a large amount of support and openness.

Scale 2: Character of Motivational Forces

- a) Underlying motives tapped and manner in which they are used. Physical security and economic needs, low score; full use of ego and other major motives, high score.
- b) Kinds of attitudes developed toward the organization and its goals. Hostile, low score; favourable, high score.
- c) Amount of responsibility felt by each member of the organization for achieving organization goals. Responsibility felt at all levels, high score; responsibility felt mainly by management, low score.
- d) Attitudes toward other members of the organization. Favourable and co-operative, high score; subservient with some hostility toward peers, low score.

Scale 3: Character of the Communication Process

- a) Direction of information flow. Downward only, low score; upward

and downward, high score.

- b) Amount of communication about organization's objectives—the more the communication the higher the score.
- c) Psychological closeness of superiors and subordinates—very close relationships, high score.
- d) Subordinates' feelings of responsibility for initiating accurate upward communication—a considerable feeling of responsibility and much initiative, high score.
- e) Accuracy of perceptions of superiors and subordinates of each other—usually quite accurate, high score.
- f) Sideward communication—usually poor because of competition between peers, low score; good to excellent sideward communication, high score.

Scale 4: Character of Interaction-Influence Process

- a) Amount of co-operation and teamwork—very substantial amount throughout the organization, high score.
- b) Extent to which subordinates can influence the goals, methods and activities of their units as seen by superiors and subordinates—none, low score; a great deal, high score.
- c) Extent to which a structure exists enabling one part of the organization to exert influence upon other parts—highly effective structure exists enabling exercise of influence in all directions, high score; effective structure virtually not present, low score.

Scale 5: Character of the Decision-Making Process

- a) Adequacy and accuracy of information available for decision making—relatively complete and accurate, high score.

- b) Extent to which decisions made by superior or by group participation—by group participation and usually with consensus, high score; by superiors alone, low score.
- c) Extent to which decision makers are aware of problems especially at lower levels in the organization—quite well aware of problems, high score.
- d) Extent to which technical and professional knowledge is used in decision making—most of what is available anywhere in the organization is used, high score.

Scale 6: Character of Goal Setting or Ordering

- a) Extent to which different hierarchial levels tend to strive for high performance goals—high goals pressed by top and generally resisted by subordinates, low score.
- b) Type of forces to accept, resist or reject goals—goals fully accepted both overtly and covertly, high score.

Scale 7: Character of Control Processes

- a) The hierarchial levels in the organization where major or primary concern exists with regard to the performance of the control function—high score when concern for performance of the control functions likely to be felt throughout the organization.
- b) Accuracy of measurements and information used to guide and perform the control function and extent to which forces exist in the organization to distort and falsify this information—strong pressures to obtain complete and accurate information, high score; very strong forces to distort and falsify information, low score.
- c) Extent to which there is an informal organization present and

supporting or opposing goals of the informal organization—
 informal organization present and opposing goals of formal
 organization, low score; all social forces support efforts to
 achieve organization's goals, high score.

3.3 Graphical Presentation of Likert Questionnaire Results

The traditional method of presenting the Likert Profile of Organizational Characteristics is graphical. This form allows the questionnaire answers to be plotted directly onto a compatible graph form, allowing for necessary changes where the items on the scales in the questionnaire have been reversed. The results are plotted by class as shown on Exhibits 3.4, 3.5, 3.6 and 3.7. Changes are evident in every class and in every scale. There is no evidence of a general attitude shift either to the right or to the left. The textbook case is, of course, to have an evident separation between the pretest and post-test plots with the conclusion that the management system has moved either to the right or the left.

Two general conclusions can be drawn from Exhibits 3.4, 3.5, 3.6 and 3.7:

(a) Variations between pretest and post-test scores occurred in most of the scales. These were not always in the same direction.

(b) Both before and after the course, student attitudes were well to the left in the various scales indicating favourable attitudes toward participative management styles.

Beyond this it seemed impossible to go, so attention was turned toward utilizing more sophisticated analytical tools.

3.4 Computer Analysis of the Likert Questionnaire Results by Scales

In view of the relatively small changes between the pretest and

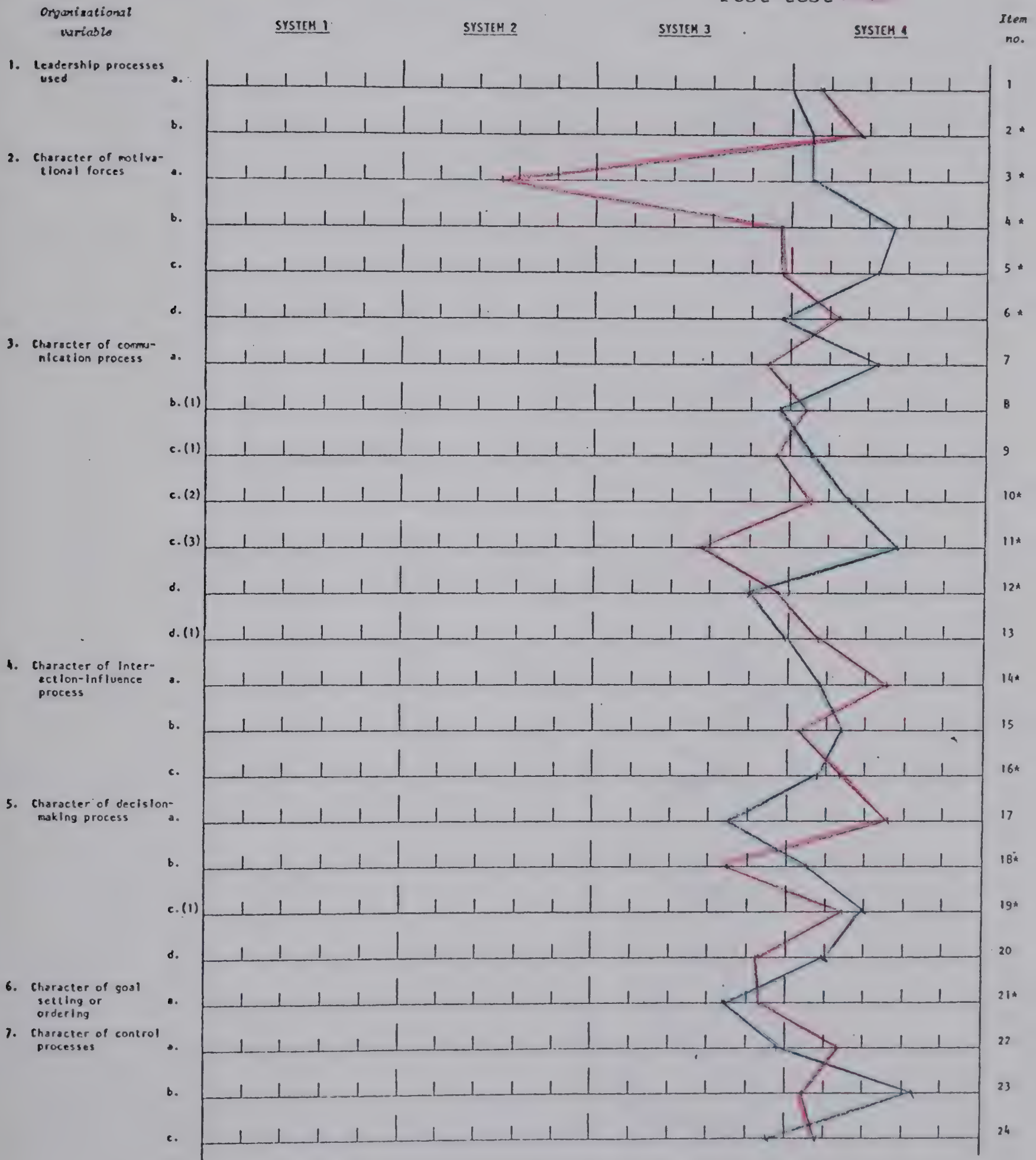
EXHIBIT 3.4

GRAPHIC PROFILE OF ORGANIZATIONAL CHARACTERISTICS

FORM E

CLASS: BO&A I

N = 6

Pretest —
Post-test —

* Since the scale for each of these items is the reverse of that on respondent's FORM, the data should be plotted accordingly to develop the PROFILE for the SYSTEM 1 to SYSTEM 4 continuum.

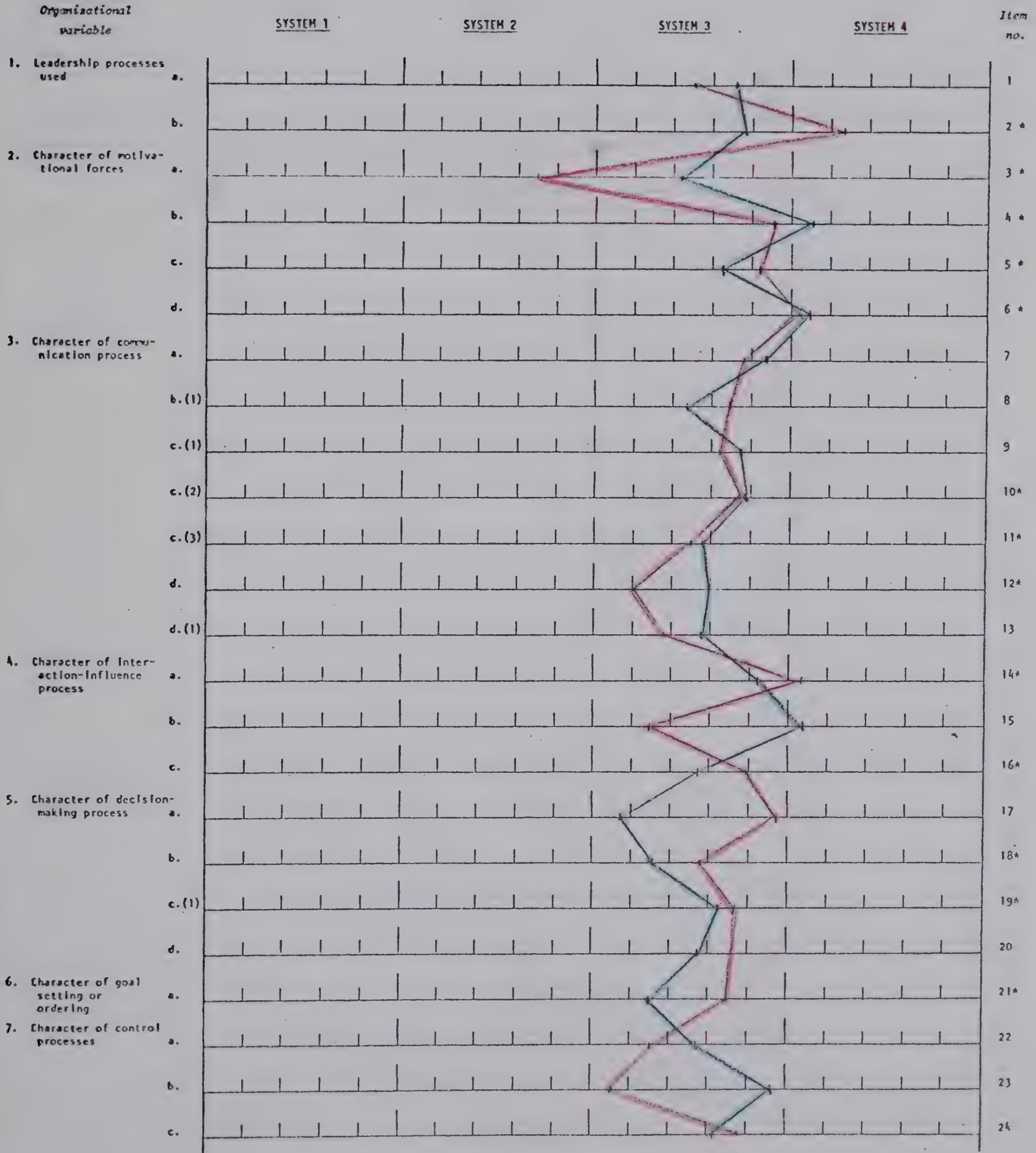
EXHIBIT 3.5

GRAPHIC PROFILE OF ORGANIZATIONAL CHARACTERISTICS

FORM E

CLASS: BO&A IV

N = 28

Pretest —
Post-test —

*Since the scale for each of these items is the reverse of that on respondent's FORM, the data should be plotted accordingly to develop the PROFILE for the SYSTEM 1 to SYSTEM 4 continuum.

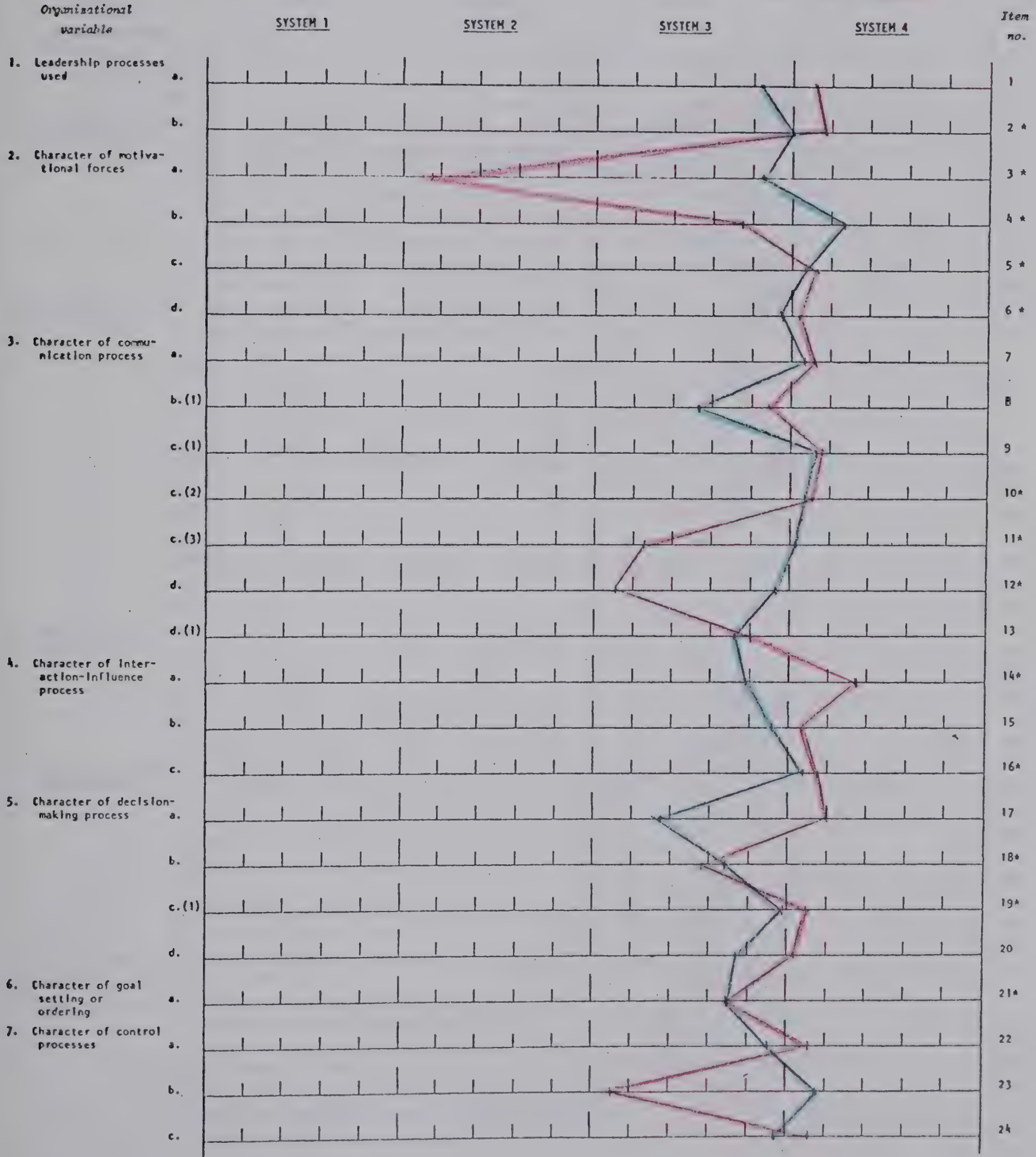
EXHIBIT 3.6

GRAPHIC PROFILE OF ORGANIZATIONAL CHARACTERISTICS

FORM E

CLASS: BO&A V

N = 10

Pretest ———
Post-test ———

*Since the scale for each of these items is the reverse of that on respondent's FORM, the data should be plotted accordingly to develop the PROFILE for the SYSTEM 1 to SYSTEM 4 continuum.

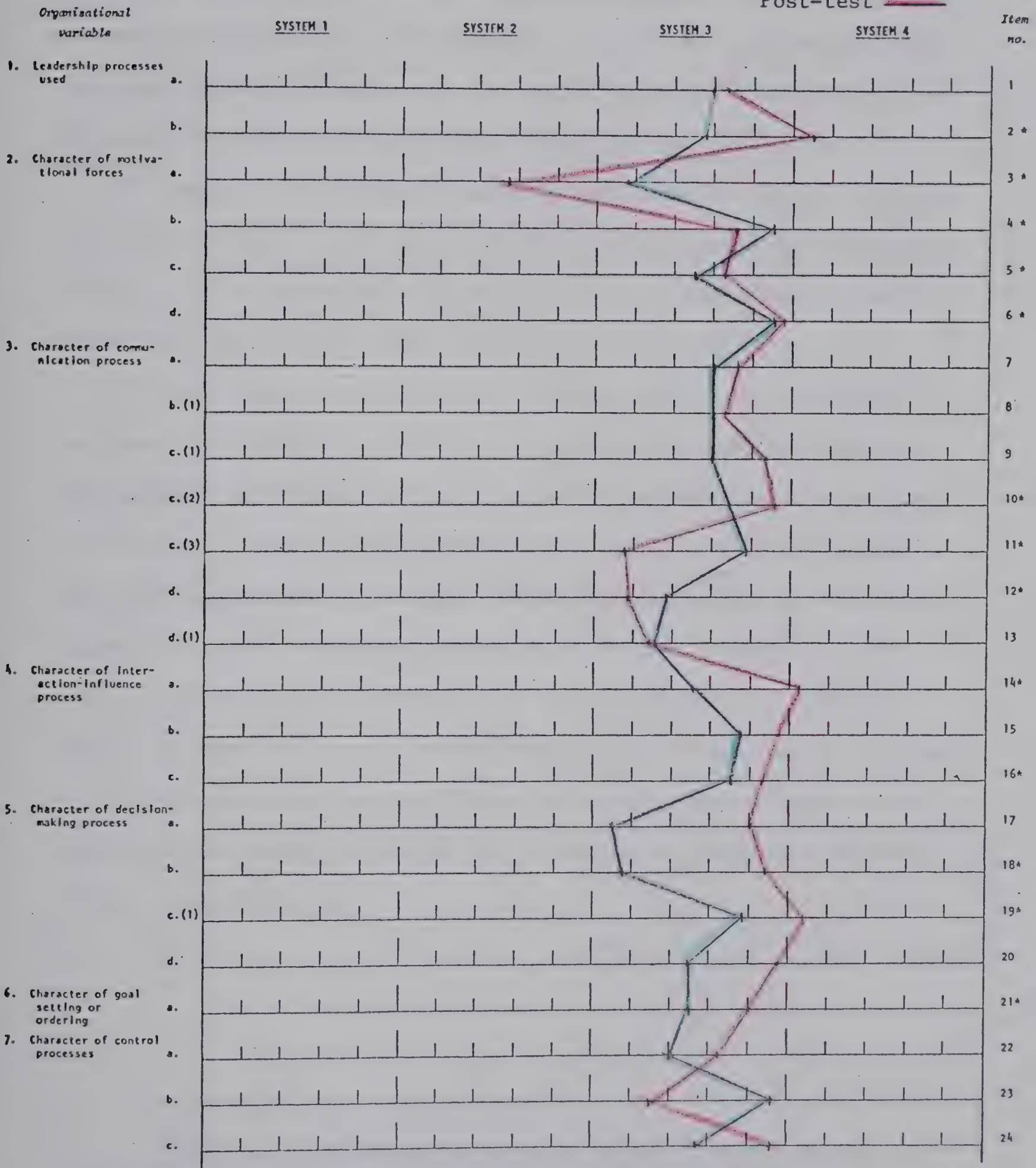
EXHIBIT 3.7

GRAPHIC PROFILE OF ORGANIZATIONAL CHARACTERISTICS

FORM E

CLASS: BO&A SUMMER

N = 25

Pretest —
Post-test —

* Since the scale for each of these items is the reverse of that on respondent's FORM, the data should be plotted accordingly to develop the PROFILE for the SYSTEM 1 to SYSTEM 4 continuum.

post-test scores, it was apparent that a numerical analysis should be made of the data. Martin Garrett, who was during 1970 a graduate student in the Faculty of Business Administration and Commerce, provided invaluable assistance in processing this data. The software employed was the Statistical Package for the Social Sciences²² with the program using 200 K storage and sub-program using codebook facilities.

Pretest and post-test scores in all scales and for all sections and the total sample were compared and the significance of changes was tested. On the following pages all this data is summarized in table form, with explanatory comments following each table.

The information in Exhibits 3.8 to 3.14 includes the pretest and post-test scores for each of the four classes studied. Positive and negative differences between the pretest and post-test scores were calculated. A *t* score was calculated for each of these differences to test its significance. The last line in the first part of each table shows the *t* score indicating significance at the .05 level.

The second part of each table in the Exhibits 3.8 to 3.14 series compares the pretest scores between each class. Again *t* scores are shown indicating the significance of the difference between each of the pretest means as well as the *t* score level which assures confidence at the .05 level.

²²Nie, Bent and Hull, Statistical Package for the Social Sciences (Provisional User's Manual).

EXHIBIT 3.8

LIKERT SCALE ANALYSIS

Scale 1: Leadership Processes Used

	<u>Total Sample</u>	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
Class number	69	6	28	10	25
Pretest	13.2	15.8	13.1	14.4	12.3
Post-test	14.8	16.3	14.6	15.9	14.3
difference	+1.6	+0.5	+1.5	+1.5	+2.0
t	3.5	0.52	2.32	1.41	2.41
P = .05	2.01	2.57	2.06	2.23	2.06

DIFFERENCES ON SCALE 1 - PRETESTS

	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
	15.8	13.1	14.4	12.3
BO&A I, 15.8	-	2.7 (t = 5.20)	1.4 (t = 1.56)	3.5 (t = 5.65)
P = .05		2.04	2.23	2.06
BO&A IV, 13.1	-	-	1.3 (t = 1.43)	0.8 (t = 1.26)
P = .05			2.04	2.01
BO&A V, 14.4	-	-	-	2.1 (t = 2.17)
P = .05				2.04

Exhibit 3.8 indicates a significant shift in student attitudes in Scale 1. The means for the total sample and the means for the two larger classes changed in a positive direction by an amount statistically significant at the .05 level. The means for the two small classes also increased.

This change was to be expected because it indicates that student attitudes toward what constitutes an effective management system shifted toward a more subordinate centered leadership process. Following the course, they felt that superiors and subordinates should have more trust

and confidence in each other. Also, they felt that superiors should involve their subordinates in the problem-solving process to a greater extent than before and that there should be a greater degree of openness in the superior-subordinate relationship. A course which emphasises the behavioral science approach to business organizations and administration should produce such changes. For example, the work of Douglas MacGregor was discussed in some detail. Throughout the course the problems of unlocking the potential within organizational members were analysed and the point was repeatedly made that this potential could only be developed in a supportive climate. Much of the course material should have led the students to raise their expectations of what people in general and the subordinates in particular ought to be able to do.

The two classes showing the most significant change between the Scale 1 pretest and post-test scores were those which had the lowest pretest scores. Reference to Exhibit 3.8 will show that the BO&A IV and BO&A Summer classes both had pretest scores which were significantly lower than the pretest scores in BO&A I and BO&A V. This educational program appeared to be effective in changing attitudes toward the kind of leadership processes used when initial attitudes were below a given level and, in fact, the lower the pretest score the greater the change that takes place.

At this point it may be useful to raise the question of why the pretest varies between classes. An examination of Exhibit 2.2 shows the following differences between BO&A I and V and BO&A IV and Summer as respective groups:

- the average age of the BO&A IV-Summer group was lower—31.5 vs. 33.0;

- the BO&A IV-Summer group may have had slightly less formal education. The median for the BO&A I-V group was "some post-secondary education" while in the BO&A IV-Summer group it was high school graduation.
- the BO&A IV-Summer group had more working experience. The median years of experience for this group was more than 10, while the median in the BO&A I-V group was 6 to 10.

The students with the lower pretest scores were, therefore, a bit younger, a bit less educated, but slightly more experienced on the job than the students with higher pretest scores.

EXHIBIT 3.9

LIKERT SCALE ANALYSIS

Scale 2: Character of Motivational Forces

	<u>Total Sample</u>	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
Class number	69	6	28	10	25
Pretest	14.6	16.1	14.7	15.4	13.8
Post-test	12.8	13.3	13.1	12.6	12.5
difference	-1.8	-2.8	-1.6	-2.8	-1.3
t	4.56	2.06	2.55	3.01	1.89
P = .05	2.01	2.57	2.06	2.23	2.06

DIFFERENCES ON SCALE 2 - PRETESTS

	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
	16.1	14.7	15.4	13.8
BO&A I, 16.1	-	1.4 (t = 1.195)	0.7 (t = .414)	2.3 (t = 1.95)
P = .05		2.04	2.23	2.06
BO&A IV, 14.7	-	-	0.7 (t = .75)	0.9 (t = .75)
P = .05			2.04	2.01
BO&A V, 15.4	-	-	-	1.6 (t = 1.69)
P = .05				2.04

The Scale 2 scores reported in Exhibit 3.9 seem to indicate an unexpected shift, significant at the .05 level, in student attitudes in regard to the character of the motivational forces which they feel are characteristic of effective management systems. In the post-test the students seemed to be placing greater emphasis on traditional economic and security needs to provide motivation. They felt, too, that attitudes in an effective management system would usually be supportive of organizational goals and would usually be favourable toward others in the organization. The negative change in feeling between the pretest and

post-test is significant and in the direction of a more authoritative rather than participative approach.

What we may be seeing in this scale is simply a more realistic approach to defining an effective management system. During the course the students will have become more aware of the various needs underlying an individual's motivation and the opportunities for meeting these needs afforded by various organizational situations will have been discussed. While the course content emphasised participation and development of attitudes supportive of organizational goals, it also looked at the difficult problems of creating any kind of organization in which all the roles provide opportunities for meeting higher level needs.

It can be argued, therefore, that the change on this scale follows logically from what the students learned in this course. They started out accepting the idea that an effective management system would utilize motivational forces based on a very high level of participation with almost all organizational members committed to the organizational goals and supportive of each other's behavior aimed at their attainment. After the course there was a realization that it was not possible to attain this optimum situation and so they described the character of the motivational forces for an effective management system in more realistic terms.

A look at the statistics for the individual classes reveals that those with the highest pretest scores experienced the greatest change. Reference to Exhibit 3.9 reveals that there were no significant differences between the pretest scores in the various classes. The post-test scores exhibit even less variation. Significant changes occurred in BO&A IV and BO&A V. The one distinctive common feature in the profiles

of the students in these two classes is that they each included people who had taken other management development courses. This may have influenced the attitudes of the class groups, but it is not possible to draw any conclusions inasmuch as we know little of the nature of the other courses followed.

EXHIBIT 3.10

LIKERT SCALE ANALYSIS

Scale 3: Character of Communication Process

	<u>Total Sample</u>	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
Class number	69	6	28	10	25
Pretest	13.5	15.8	13.3	14.6	12.8
Post-test	12.9	15.0	12.9	13.9	12.2
difference	-0.6	-0.8	-0.4	-0.7	-0.6
t	1.18	0.50	0.51	0.70	0.68
P = .05	2.01	2.57	2.06	2.23	2.06

DIFFERENCES ON SCALE 3 - PRETESTS

	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
	15.8	13.3	14.6	12.8
BO&A I, 15.8	-	2.5 (t = 2.40)	1.2 (t = 1.02)	3.0 (t = 0.62)
P = .05		2.04	2.23	2.06
BO&A IV, 13.3	-	-	1.3 (t = 1.30)	0.5 (t = .640)
P = .05			2.04	2.01
BO&A V, 14.6	-	-	-	1.8 (t = 1.83)
P = .05				2.04

Exhibit 3.10 indicates that there were no statistically significant changes in Scale 3, although all the changes that did occur were negative. Actually, a score of around 13 indicates the following kinds of attitudes toward what is desirable in the communication process:

- information flow both down and up.
- superiors giving needed information and answering most questions.
- some upward communication via the organization.
- some distorted upward communication, but most accurate. Only

a slight need for supplementary upward communication systems.

- fairly friendly relationships between superiors and subordinates.

- some downward communication initiated at lower levels.

It indicates that a fairly high value is set on good upward and downward communications within the organization. One thing that does seem to be downgraded in the answers is the importance of peer group communication. This is surprising in view of the emphasis in the course on the team approach and the idea of mutual interdependence. It may point to a probable shortening in the program and/or the instruction.

The pretest results seem to indicate that the students started the Business Organization and Administration course with fairly progressive attitudes toward the communication process. Inasmuch as the program did not concentrate on communication, it may be that a change in this scale should not have been expected.

EXHIBIT 3.11

LIKERT SCALE ANALYSIS

Scale 4: Character of the Interaction-Influence Process

	<u>Total Sample</u>	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
Class number	69	6	28	10	25
Pretest	14.0	15.9	14.0	14.6	13.3
Post-test	14.4	16.3	13.3	15.9	14.6
difference	+0.4	+0.4	-0.7	+1.3	+1.3
t	0.83	0.303	0.960	0.930	1.70
P = .05	2.01	2.57	2.06	2.23	2.06

DIFFERENCES ON SCALE 4 - PRETESTS

	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
	15.9	14.0	14.6	13.3
BO&A I, 15.9	-	1.9 (t = 1.82)	1.3 (t = .855)	2.6 (t = 2.40)
P = .05		2.04	2.23	2.06
BO&A IV, 14.0	-	-	0.6 (t = .456)	0.7 (t = 1.03)
P = .05			2.04	2.01
BO&A V, 14.6	-	-	-	1.3 (t = 1.00)
P = .05				2.04

Scale 4 is another in which there were no significant changes. (See Exhibit 3.11) Both the pretest and the post-test scores indicated the students felt that an effective management system should be characterised by a fairly high level of interaction, trust, confidence, and co-operative teamwork. They were of the view that subordinates should have some influence over goals, but that the main influence is exerted by superiors.

Basically, the students favoured a relatively high degree of interaction at the beginning of the course, which was not significantly

effected by their educational experience. It may be a difficult attitude to influence because of the emphasis on hierarchial authority in the organizations to which most of the students belonged. This tends to place limits on the extent to which subordinates can influence goals of their own units and, more particularly, influence other parts of their organizations. The fact that this variable did not change while the attitudes on Scale 1 (Leadership Processes Used) moved toward a more democratic form seems at first to be contradictory. We do not know, of course, what score would be required on Scale 4 to support a given score on Scale 1. Perhaps the existing attitudes in the area measured by Scale 4 are supportive of a democratic leadership process.

EXHIBIT 3.12

LIKERT SCALE ANALYSIS

Scale 5: Character of Decision-Making Process

	<u>Total Sample</u>	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
Class number	69	6	28	10	25
Pretest	12.9	15.5	12.1	13.7	11.9
Post-test	13.8	15.5	13.1	14.9	13.9
difference	+1.2	0	+1.0	+1.2	+2.0
t	2.09	-	0.67	1.00	2.03
P = .05	2.01	2.57	2.06	2.23	2.06

DIFFERENCES ON SCALE 5 - PRETEST

	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
	15.5	12.1	13.7	11.9
BO&A I, 15.1	-	3.0 (t = 2.75)	1.4 (t = 1.15)	3.2 (t = 2.71)
P = .05		2.04	2.23	2.06
BO&A IV, 12.1	-	-	1.6 (t = 1.69)	0.2 (t = .231)
P = .05			2.04	2.01
BO&A V, 13.7	-	-	-	1.8 (t = 1.50)
P = .05				2.04

The significant increase in scores for Scale 5 (Exhibit 3.12) indicates the following changes in attitude toward what constitutes the decision-making process in an effective management system:

- an increased involvement of subordinates in decision making.
- more emphasis on the use of expert knowledge in decision making.
- more attempt to use the decision-making process in such a way as to motivate implementation.

This change would be expected from the nature of the course. The

problems of decision making came up repeatedly, both in the theoretical material and in the cases. Behavioral science findings point to the benefits derived from involving subordinates (usually the implementors) in the decision-making process. It will probably result in a better decision and it will almost certainly result in more commitment to the decision on the part of the subordinate. Another aspect of organizations covered in the course material is the problem of their growing complexity. It follows from this that increased emphasis should be placed on the utilization of expert knowledge in making decisions.

When we look at the class breakdown on Scale 5 we find the only significant change is in the Summer section. The unique characteristics of the BO&A Summer group include the following:

- lowest pretest score (although only significantly lower than the pretest for BO&A I),
- lowest average age (29 vs. 34),
- more concentrated course (50 classroom hours over 10 weeks rather than 25 weeks).

EXHIBIT 3.13

LIKERT SCALE ANALYSIS

Scale 6: Character of Goal Setting or Ordering

	<u>Total Sample</u>	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
Class number	69	6	28	10	25
Pretest	12.6	14.3	12.0	14.0	12.4
Post-test	13.2	14.3	12.6	13.4	13.4
difference	+0.6	0	+0.6	-0.6	+1.0
t	0.945	-	0.557	0.495	0.908
P = .05	2.01	2.57	2.06	2.23	2.06

DIFFERENCES ON SCALE 6 - PRETESTS

	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
	14.3	12.0	14.0	12.4
BO&A I, 14.3	-	2.3 (t = 1.67)	0.3 (t = .200)	1.9 (t = 1.35)
P = .05		2.04	2.23	2.06
BO&A IV, 12.0	-	-	2.0 (t = 2.12)	0.4 (t = .570)
P = .05			2.04	2.01
BO&A V, 14.0	-	-	-	1.6 (t = 1.65)
P = .05				2.04

Scale 6 attitudes, shown in Exhibit 3.13, did not show any significant changes. Test scores reflect some participation by subordinates in goal setting, but they also recognize a certain degree of resistance on the part of subordinates to organizational goals. While the course did emphasise the values of involving subordinates in the goal-setting function, it also pointed to the difficulties. Students were alerted to the fact that many organizational members cannot be expected to take an interest in organizational goals and that this should be recognized by managers. The fact that the student sample

involved in this study consisted largely of lower management people may also be of significance. These are the people who face the problem of dealing with rank and file organization members and they see first hand the difficulty of involving many of their people in goal setting.

EXHIBIT 3.14

LIKERT SCALE ANALYSIS

Scale 7: Character of Control Processes

	<u>Total Sample</u>	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
Class number	69	6	28	10	25
Pretest	14.3	16.3	13.9	15.4	13.7
Post-test	12.3	14.9	11.2	13.9	12.3
difference	-2.0	-1.4	-2.7	-1.5	-1.4
t	3.39	1.060	2.92	1.27	1.34
P = .05	2.01	2.57	2.06	2.23	2.06

DIFFERENCES ON SCALE 7 - PRETESTS

	<u>BO&A I</u>	<u>BO&A IV</u>	<u>BO&A V</u>	<u>BO&A Summer</u>
	16.3	13.9	15.4	13.7
BO&A I, 16.3	-	2.4 (t = 2.70)	0.9 (t = .801)	2.6 (t = 2.24)
P = .05		2.04	2.23	2.06
BO&A IV, 13.9	-	-	1.5 (t = 1.78)	0.2 (t = .285)
P = .05			2.04	2.01
BO&A V, 15.4	-	-	-	1.7 (t = 1.74)
P = .05				2.04

Exhibit 13.4 shows that the total sample records a significant decrease in score for Scale 7. The post-test score of 12.3 indicates the following general attitudes toward what are desirable characteristics for control processes:

- major concern for control process is primarily at the "top" but some shared responsibility felt at middle and lower levels,
- moderate downward delegation of review and control processes,
- control data used for policing with emphasis usually on reward, but with some punishment; used for guidance in accord

with orders; some use also for self-guidance.

The change in this scale indicates a shift in attitudes toward more centralization of control processes. That is, more concern for control purposes at the "top", less downward delegation of review and control processes, and more emphasis on use of control data for policing. The change was not great, but it was in these general directions.

It may have been due in part to the emphasis in the course of the impact of computers on the control systems of organizations. Even decentralized structures demonstrate a centralized aspect when they are utilizing a computer to handle accounting and control data. The change may even reflect a reactionary response to the concepts of organizational behavior. An attitude perhaps of "let them have a high level of freedom, but it had better pay off and management should apply the controls necessary to be sure it does."

On the class breakdown only BO&A IV showed a significant change in attitudes. It had the second lowest pretest score and by much the lowest post-test score. There are not any really outstanding differences between the profiles of the students in BO&A IV and the other classes. The pretest score in BO&A IV differed significantly only from the pretest score in BO&A I, a small class in which the students had somewhat less work experience.

CHAPTER 4

DISCUSSION

4.1 Conclusions from the Likert Questionnaire Results

The changes determined by this study are summarized in Exhibit 4.1.

EXHIBIT 4.1

SCALE CHANGES — TOTAL SAMPLE

Significant positive changes	{ 1. Leadership processes used. 5. Character of decision-making processes.
Significant negative changes	{ 2. Character of motivational forces. 7. Character of control processes.
No significant changes	{ 3. Character of the communication process. 4. Character of the interaction-influence process. 6. Character of goal setting or ordering.

The second part of the hypothesis on page 25 stated that "participation in the course Business Organization and Administration will change students' attitudes toward the desirability of using specific management styles which are consultative and participative rather than authoritarian." It anticipated that involvement in the Business Organization and Administration course would result in positive changes between scores attained on pretest and post-test Likert questionnaires. As Exhibit 4.1 reveals, out of seven Likert scales there were two significant positive changes and two significant negative changes. Three of the scales showed no change. Exhibits 4.2 and 4.3 further illustrate the changes that did take place.

While it cannot be claimed that the data supports the hypothesis,

EXHIBIT 4.2

LIKERT PRETEST-POST-TEST SCORE CHANGES

Total Sample 69

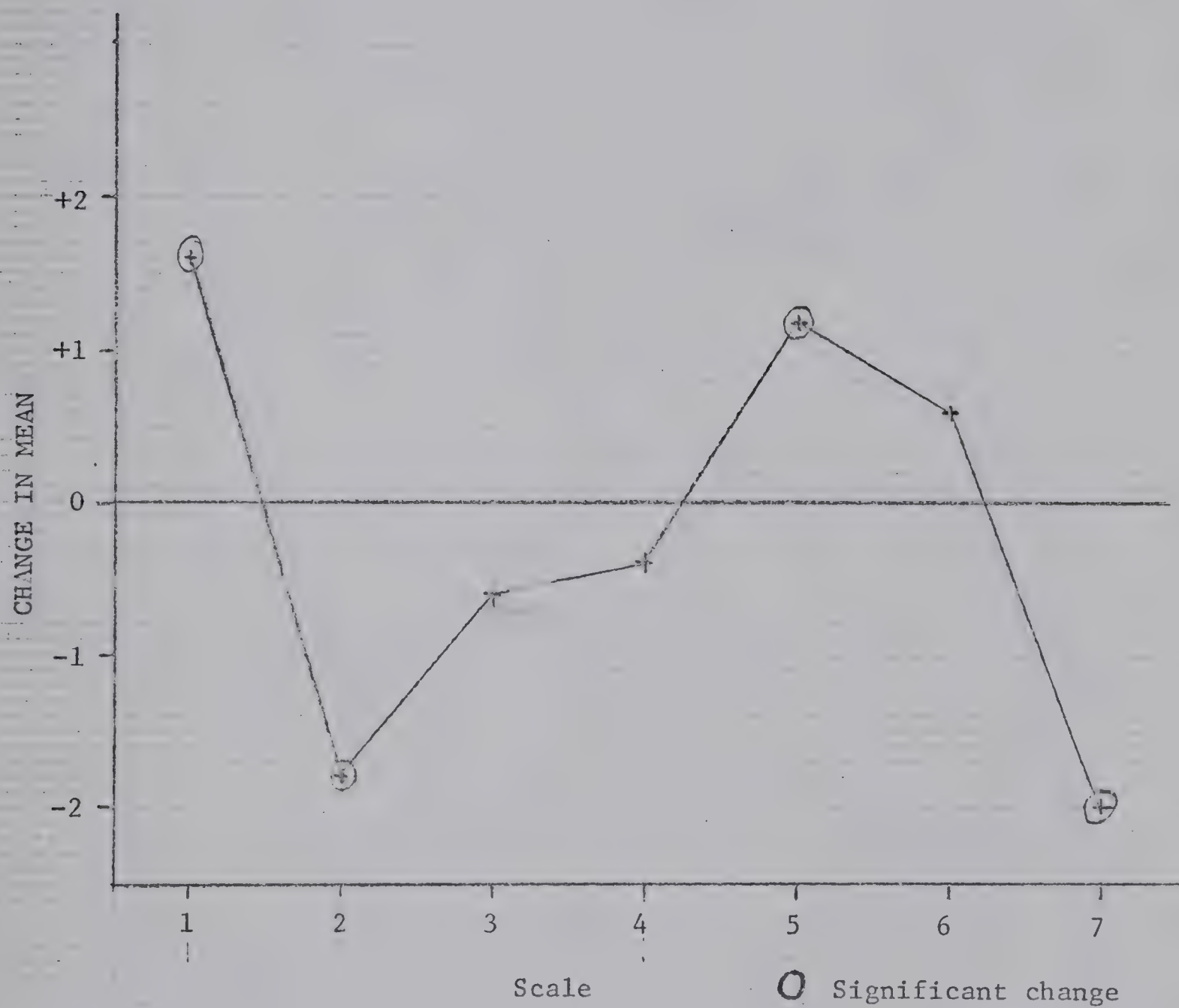
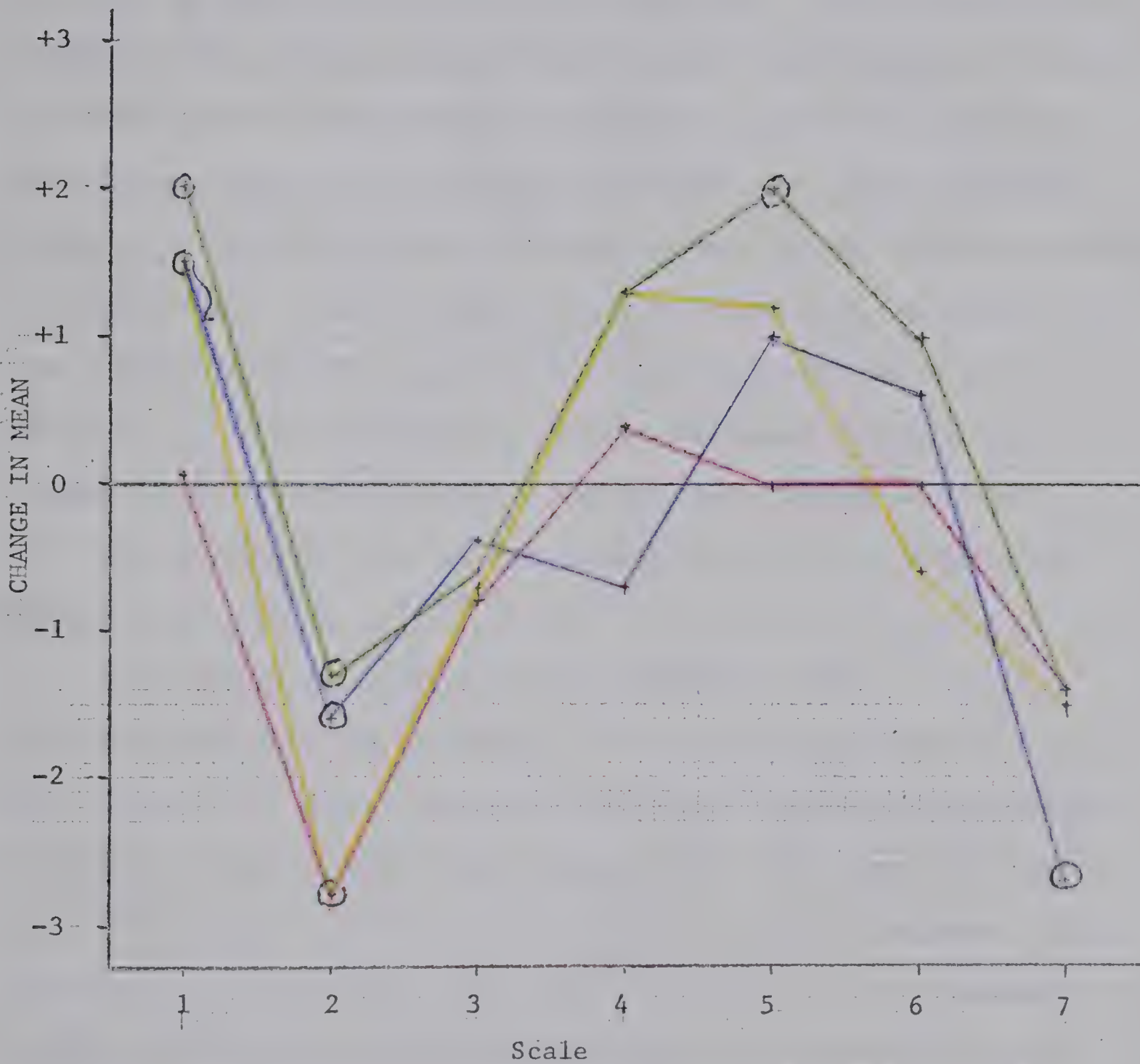


EXHIBIT 4.3

LIKERT PRETEST-POST-TEST SCORE CHANGES
BY CLASS AND SCALE



Classes: I — 6 V — 10 Significant
 IV — 28 S — 25 Changes $t \geq 2.01$
 (Significant changes circled)

it does seem clear that attitudes were changed as a result of exposure to the course. Four out of the seven scales demonstrated a statistically significant change in score between pretest and post-test. The positive changes were in the area of leadership processes used (Scale 1) and character of decision-making processes (Scale 5). Actually, methods of leadership and decision making are probably the most sensitive indicators of a move toward a more consultative and participative management style. They are sensitive from the following point of view. Someone who was beginning to accept the idea of adopting a consultative and participative management style could most easily see a way of putting the concept into practice through making changes in his leadership and decision-making processes. A look at Exhibit 4.3 reveals that there were positive changes for all classes on Scale 3 and for three classes on Scale 5. The class showing no change on Scale 5 was one of the two small ones, $n = 6$.

The significant negative changes (Scales 2 and 7) are more surprising and difficult to explain. The score change between the pre-test and post-test Likert questionnaires showed a swing to more emphasis on lower level motivators. Score changes on the character of control processes indicated more favourable attitudes toward a management style which emphasised centralized functions in this area. It was suggested earlier that these changes may be reflections of a realistic point of view toward the limitations of creating work situations which provide opportunities for higher level need satisfaction. Similarly the presence of modern data processing systems backed by high level computing capacity demand an element of centralization in control functions. Reference to Exhibit 4.3 shows that there was a negative change in all

four classes. This demonstrated a high level of consistency in the effects of the educational program on these attitudes.

Exhibit 4.3 also reveals a certain consistency in the behavior of score changes on Scales 3, 4 and 6. For the most part the changes that did take place appear to be in the same direction. Of course, these changes were not significant at the .05 level, so we must ask why this is so. The attitudes tested by these scales may point to areas in the educational program which were not emphasised. The course Business Organization and Administration did not give a major amount of attention to communication or goal setting as such, although both these subjects were, to a certain extent, woven into the fabric of the curriculum. It can be concluded that the educational input from the course did not have the effect of changing student attitudes in these three important areas.

There does not appear to be support for part two of the hypothesis, but there is clear evidence that educational programs of the type studied here can change student attitudes. Exhibit 4.2 shows clearly the four areas where attitudes have been changed. Exhibit 4.3 shows the same thing but in addition it demonstrates that there were parallel patterns of change between each class, providing added weight to the conclusion that inputs of this type can result in attitude change. It provides valuable feedback to the instructors of this course enabling them to compare attitude changes with course objectives and attempt to correct discrepancies they may find by changing course content and/or instruction methodology.

4.2 Areas for Additional Research

Additional empirical work should be done on other classes to see if the change patterns summarized in Exhibits 4.2 and 4.3 are maintained.

A further three classes are now being tested with pretest questionnaires having been completed by 105 students. The inputs have remained the same so results should serve as a check on the work described in this thesis. The obvious next step will be to make changes in the educational inputs in order to obtain desired changes in attitudes. For example, a re-design of portions of the educational experience might result in positive changes on Scale 2, the character of motivational forces.

As far as test instruments are concerned, others should probably be tried. The Schein questionnaire does not seem to be suitable and it has not been used in the work currently underway. Likert's questionnaire has proven useful for testing the effects of this particular educational program but use of others, such as the Miner Sentence Completion Test,²³ should be tried.

An extension of this research would be to extend the testing of the model in Exhibit 1.3. In the present work an attempt has been made to examine the nature of the immediate outputs (attitudes). The final outputs of the model include changes in managerial job performance and consequent changes in organizational outputs. It would be a finding of considerable practical importance if a relationship between the management development program and changes in managerial performance could be proven. Such a task presents a number of challenges, especially in the cases now under study, because of the difficulties in making "back on the job measurements." But it does provide a fertile field for continuing research.

²³J. B. Miner, Studies in Management Education (New York: Springer Publishing Company, Inc., 1965).

APPENDIX I

PERSONAL OPINION QUESTIONNAIRE III

Instructions

Below you will find a number of items dealing with various aspects of business management. Please indicate next to each item your degree of agreement or disagreement by writing the number 1, 2, 3, or 4.

1 means strong agreement.

2 means mild agreement.

3 means mild disagreement.

4 means strong disagreement.

Please try to be as frank as you can in giving your opinion. *There are no right or wrong answers to any of the items.* We are trying to find out how people feel about the issues which are described in the items.

If any item makes no sense to you at all, or you genuinely have no opinion about an issue, leave it blank. But please try to give answers to as many of the items as possible.

1 strong agreement
2 mild agreement

3 mild disagreement
4 strong disagreement

- ___ 1. Governmentally operated projects cannot compete with private enterprise because they are less efficient.
- ___ 2. Group decisions are generally more conservative than what the leader of the group would have done had he decided alone.
- ___ 3. The man who gets ahead in industry is the man who has someone sponsoring him.
- ___ 4. Most industrial problems can be attributed to a few basic causes.
- ___ 5. Most workers in industry can be trusted enough to be allowed to set their own production goals.
- ___ 6. Government should be headed by men trained in business techniques and sympathetic to the cause of business.
- ___ 7. Most consumers' products manufactured today have been designed to last only a few years.
- ___ 8. In industry there must always be unity of command so that individuals will not be subjected to conflicting authority.
- ___ 9. The man who gets ahead in industry is the man who knows the right people.
- ___ 10. Private enterprise working through a market economy provides the most equitable distribution of society's goods and services.
- ___ 11. Proper advertising can sell virtually any product.
- ___ 12. The best way to get ahead in business is to move from organization to organization.
- ___ 13. Corporations have a definite obligation to take a stand on political issues.
- ___ 14. The quality of individual decisions is generally higher than the quality of group decisions.
- ___ 15. Resistance to change is industry's major problem.
- ___ 16. The private life of an employee should be of no direct concern to his company.
- ___ 17. The good manager must be willing to compromise his own ethics and morals to some degree in order to get his job done.
- ___ 18. The most important objective of a company is to allow for the maximum development of its employees as individuals.
- ___ 19. A corporation with a good public image can sell even an inferior product.
- ___ 20. The average worker in industry is capable of exercising self-control.
- ___ 21. The most important objective of a company is to provide its stockholders with as high a return on their investment as is possible.

1 strong agreement
2 mild agreement

3 mild disagreement
4 strong disagreement

- ___ 22. Corporations have a definite obligation to support liberal arts colleges.
- ___ 23. Most organizations would be more effective if they used committees to make some of their decisions.
- ___ 24. The primary purpose of a training program for college graduates should be to indoctrinate them with the organization's basic philosophy, goals, and ways of doing things.
- ___ 25. A small company is generally a more desirable employer than a large corporation because it offers greater opportunity for the individual to maximize his talents.
- ___ 26. The good manager is willing to make decisions which will hurt others.
- ___ 27. Corporations have a definite obligation to give money to charity.
- ___ 28. Managers are not always sincere in their dealings with other people.
- ___ 29. Nowadays it is more important for a manager to be loyal to his profession than to any given organization.
- ___ 30. The engineer in industry should give his primary allegiance to the company he works for, not the engineering profession as such.
- ___ 31. The best kind of emotional relationship between a superior and a subordinate is an open one in which each party feels it can "level" completely with the other.
- ___ 32. Management will usually do what is best for its employees without outside influence from unions.
- ___ 33. The one most important factor contributing to a manager's advancement is his ability to get along with people.
- ___ 34. The human relations-group dynamics approach in industry tends to stifle the individuality of employees.
- ___ 35. The average employee's standard of living would not be what it is today had it not been for the efforts of labor unions on his behalf.
- ___ 36. A large corporation is generally a more desirable employer than a small company since it offers security, regular advancement, and a wider selection of jobs.
- ___ 37. The good manager should disregard the feelings of others in making decisions.
- ___ 38. Government competition with private enterprise is unfair and should be eliminated.
- ___ 39. Piece work systems are bad for company morale since they force competition between fellow workers.
- ___ 40. The good businessman is basically a cold, calculating kind of person.

1 strong agreement
2 mild agreement

3 mild disagreement
4 strong disagreement

- ___ 41. Most corporations do not have clear objectives which can serve as guides to executive decisions.
- ___ 42. Industry's basic idea is to drive you as hard as it can and give you as little as possible.
- ___ 43. A young man entering industry should be careful in selecting a wife to make sure she will fit into his career plans.
- ___ 44. The average worker in industry prefers to avoid responsibility, has little ambition, and wants security above all.
- ___ 45. Many employers think only of their profits and care little for their employees' welfare.
- ___ 46. It is the tough, driving, impersonal man who really gets ahead in industry.
- ___ 47. The "committee way of life" in an organization often results in a good bit of wasted time.
- ___ 48. The successful manager is a "jack of all trades and master of none".
- ___ 49. Piece work systems are good for company morale because they stimulate high productivity.
- ___ 50. Constant change and innovation is basically a good thing for society and its institutions.
- ___ 51. One of the major reasons for the existence of company pension plans is that they insure the loyalty of the older employees.
- ___ 52. Responsibility should never exceed authority because the individual cannot be held responsible for what he does not control.
- ___ 53. The legal system of this country is generally slanted against big business.
- ___ 54. Nowadays when industry hires a new manager his whole family should be screened as an indication of his potential for advancement.
- ___ 55. Management will usually do what is best for its employees without outside influence from the government.
- ___ 56. Managers usually deal with people in a democratic manner.
- ___ 57. A man who is willing to work hard in industry does not need a union to protect him.
- ___ 58. The good manager should rely on explanation and persuasion rather than direct orders.
- ___ 59. To succeed in business one must be able to take criticism without being hurt by it.
- ___ 60. The private life of an employee is properly a matter of direct concern to his company, for the two can never be completely segregated.

1 strong agreement
2 mild agreement

3 mild disagreement
4 strong disagreement

- ___ 61. Most managers are delightful people to know socially.
- ___ 62. A firm separation between staff and line functions is essential to efficient company performance.
- ___ 63. Group incentive plans are superior to piece work systems in stimulating high productivity.
- ___ 64. Most large corporations are placing more stress on the "corporation loyalty" of the employee than on his individual growth.
- ___ 65. The most important objective of a company is to manufacture and sell products which are useful to society.
- ___ 66. Managers often have to treat people unfairly to get their job done.
- ___ 67. The man who gets ahead in industry is the man who knows how to "play politics".
- ___ 68. Individual decisions cannot be as consistently sound as group decisions.
- ___ 69. A corporation must be responsible for the health and welfare of its employees and their immediate families.
- ___ 70. The one most important factor contributing to a manager's advancement is his ability to place the welfare of the company above that of his friends and colleagues.
- ___ 71. The good manager should always be sensitive to the feelings of his subordinates.
- ___ 72. Management is primarily a process of understanding and adapting to economic forces.
- ___ 73. The more a young executive moves from job to job within a company, the greater will be his chance for success.
- ___ 74. Many managers are suspicious of their business associates.
- ___ 75. In business decisions, the human factor is usually more important than the economic factor.
- ___ 76. Some degree of cynicism is a valuable attribute in a manager.
- ___ 77. There are many sound principles of business which should not be changed even if economic and technological conditions change.
- ___ 78. A wife's social grace and attractiveness play a significant role in her husband's rate of advancement.
- ___ 79. The welfare of society is best achieved if all businesses pursue profit to the best of their ability.
- ___ 80. A large corporation tends to suppress individual creativity.

1 strong agreement
2 mild agreement

3 mild disagreement
4 strong disagreement

- ___ 81. "Price fixing", contract rigging, and other similar activities by leading Canadian business firms show that the Federal Government must take a more active role in the policing of private enterprise.
- ___ 82. Corporations have a definite obligation to be actively involved in community affairs.
- ___ 83. A clearcut hierarchy of authority and responsibility is the cornerstone of the business organization.
- ___ 84. Leadership skills can be acquired by most people, regardless of their particular inborn traits or abilities.
- ___ 85. Religious teachings cannot be strictly observed in the business setting.
- ___ 86. Present tax laws tend to stifle capital expansion by business more than they encourage it.
- ___ 87. The average worker in industry has an inherent dislike of work and will avoid it if he can.
- ___ 88. The successful manager is the one who becomes an expert in his own particular functions.
- ___ 89. Large corporations create more opportunities than small companies for the individual to maximize his talents.
- ___ 90. Strikes are usually caused by union leaders rather than rank-and-file members.
- ___ 91. Most managerial jobs require a person to compromise his ethics or morals to some degree.
- ___ 92. Compulsory arbitration should be instituted in vital industries such as the steel industry, to insure our country against work stoppages which jeopardize national defense.
- ___ 93. It is the responsibility of business to insure that customers do not get inferior products.
- ___ 94. The best way to get ahead in management is to have maximum experience in one field like finance, production, or marketing.

APPENDIX II

FORM T

PROFILE OF ORGANIZATIONAL CHARACTERISTICS

This questionnaire was developed for describing the management system or style used in a company or one of its divisions.

In completing the questionnaire, it is important that each individual answer each question as thoughtfully and frankly as possible. This is not a test; there are no right or wrong answers. The important thing is that you answer each question the way you see things or the way you feel about them.

INSTRUCTIONS

1. On the line below each organizational variable (item), please place an *N* at the point which, *in your experience*, describes your organization at the present time (*N* = now). Treat each item as a continuous variable from the extreme at one end to that at the other.
2. In addition, if you have been in your organization one or more years, please also place a *P* on each line at the point which, *in your experience*, describes your organization as it was one to two years ago (*P* = previously).
3. If you were not in your organization one or more years ago, please check here _____ and answer as of the present time, i.e., answer only with an *N*.

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PROFILE OF ORGANIZATIONAL CHARACTERISTICS

Organizational variable					Item no.
1. Leadership processes used					
a. Extent to which superiors have confidence and trust in subordinates	Have no confidence and trust in subordinates	Have condescending confidence and trust, such as master has in servant	Substantial but not complete confidence and trust; still wishes to keep control of decisions	Complete confidence and trust in all matters	
					1
b. Extent to which subordinates, in turn, have confidence and trust in superiors	Have no confidence and trust in superiors	Have subservient confidence and trust, such as servant has to master	Substantial but not complete confidence and trust	Complete confidence and trust	
					2
c. Extent to which superiors display supportive behavior toward others	Display no supportive behavior or virtually none	Display supportive behavior in condescending manner and situations only	Display supportive behavior quite generally	Display supportive behavior fully and in all situations	
					3
d. Extent to which superiors behave so that subordinates feel free to discuss important things about their jobs with their immediate superior	Subordinates feel completely free to discuss things about the job with their superior	Subordinates feel rather free to discuss things about the job with their superior	Subordinates do not feel very free to discuss things about the job with their superior	Subordinates do not feel at all free to discuss things about the job with their superior	
					4.
e. Extent to which immediate superior in solving job problems generally tries to get subordinates' ideas and opinions and make constructive use of them	Always gets ideas and opinions and always tries to make constructive use of them	Usually gets ideas and opinions and usually tries to make constructive use of them	Sometimes gets ideas and opinions of subordinates in solving job problems	Seldom gets ideas and opinions of subordinates in solving job problems	
					5.
2. Character of motivational forces					
a. Underlying motives tapped	Physical security, economic needs, and some use of the desire for status	Economic needs and moderate use of ego motives, e.g., desire for status, affiliation, and achievement	Economic needs and considerable use of ego and other major motives, e.g., desire for new experiences	Full use of economic, ego, and other major motives, as, for example, motivational forces arising from group goals	
					6
b. Manner in which motives are used	Fear, threats, punishment, and occasional rewards	Rewards and some actual or potential punishment	Rewards, occasional punishment, and some involvement	Economic rewards based on compensation system developed through participation; group participation and involvement in setting goals, improving methods, appraising progress toward goals, etc.	
					7

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
c. Kinds of attitudes developed toward organization and its goals	Attitudes are strongly favorable and provide powerful stimulation to behavior implementing organization's goals	Attitudes usually are favorable and support behavior implementing organization's goals	Attitudes are sometimes hostile and counter to organization's goals and are sometimes favorable to the organization's goals and support the behavior necessary to achieve them	Attitudes usually are hostile and counter to organization's goals	
					8.
d. Extent to which motivational forces conflict with or reinforce one another	Marked conflict of forces substantially reducing those motivational forces leading to behavior in support of the organization's goals	Conflict often exists; occasionally forces will reinforce each other, at least partially,	Some conflict, but often motivational forces will reinforce each other	Motivational forces generally reinforce each other in a substantial and cumulative manner	
					9
e. Amount of responsibility felt by each member of organization for achieving organization's goals	Personnel at all levels feel real responsibility for organization's goals and behave in ways to implement them	Substantial proportion of personnel, especially at higher levels, feel responsibility and generally behave in ways to achieve the organization's goals	Managerial personnel usually feel responsibility; rank and file usually feel relatively little responsibility for achieving organization's goals	High levels of management feel responsibility; lower levels feel less; rank and file feel little and often welcome opportunity to behave in ways to defeat organization's goals	
					10.
f. Attitudes toward other members of the organization	Favorable, cooperative attitudes throughout the organization with mutual trust and confidence	Cooperative, reasonably favorable attitudes toward others in organization; may be some competition between peers with resulting hostility and some condescension toward subordinates	Subservient attitudes toward superiors; competition for status resulting in hostility toward peers; condescension toward subordinates	Subservient attitudes toward superiors coupled with hostility; hostility toward peers and contempt for subordinates; distrust is widespread	
					11.
g. Satisfaction derived	Relatively high satisfaction throughout the organization with regard to membership in the organization, supervision, and one's own achievements	Some dissatisfaction to moderately high satisfaction with regard to membership in the organization, supervision, and one's own achievements	Dissatisfaction to moderate satisfaction with regard to membership in the organization, supervision, and one's own achievements	Usually dissatisfaction with membership in the organization, with supervision, and with one's own achievements	
					12.
3. Character of communication process					
a. Amount of interaction and communication aimed at achieving organization's objectives	Very little	Little	Quite a bit	Much with both individual and groups	
					13
b. Direction of information flow	Downward	Mostly downward	Down and up	Down, up, and with peers	
					14

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
c. Downward communication					
(1) Where Initiated	Initiated at all levels	Patterned on communication from top but with some initiative at lower levels	Primarily at top or patterned on communication from top	At top of organization or to implement top directive	15.
(2) Extent to which superiors willingly share information with subordinates	Provide minimum of information	Gives subordinates only information superior feels they need	Gives information needed and answers most questions	Seeks to give subordinates all relevant information and all information they want	16
(3) Extent to which communications are accepted by subordinates	Generally accepted, but if not, openly and candidly questioned	Often accepted but, if not, may or may not be openly questioned	Some accepted and some viewed with suspicion	Viewed with great suspicion	17.
d. Upward communication					
(1) Adequacy of upward communication via line organization	Very little	Limited	Some	A great deal	18
(2) Subordinates' feeling of responsibility for initiating accurate upward communication	None at all	Relatively little, usually communicates "filtered" information and only when requested; may "yes" the boss	Some to moderate degree of responsibility to initiate accurate upward communication	Considerable responsibility felt and much initiative; group communicates all relevant information	19
(3) Forces leading to accurate or distorted upward information	Virtually no forces to distort and powerful forces to communicate accurately	Occasional forces to distort along with many forces to communicate accurately	Many forces to distort; also forces for honest communication	Powerful forces to distort information and deceive superiors	20.
(4) Accuracy of upward communication via line	Accurate	Information that boss wants to hear flows; other information may be limited or cautiously given	Information that boss wants to hear flows; other information is restricted and filtered	Tends to be inaccurate	21.
(5) Need for supplementary upward communication system	No need for any supplementary system	Slight need for supplementary system; suggestion systems may be used	Upward communication often supplemented by suggestion system and similar devices	Great need to supplement upward communication by spy system, suggestion system, and similar devices	22.
e. Sideward communication, its adequacy and accuracy	Usually poor because of competition between peers, corresponding hostility	Fairly poor because of competition between peers	Fair to good	Good to excellent	23

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable	Usually very close	Fairly close	Can be moderately close If proper roles are kept	Far apart	Item no.
f. Psychological closeness of superiors to subordinates (i.e., friendliness between superiors and subordinates)					24.
(1) How well does superior know and understand problems faced by subordinates?	Knows and understands problems of subordinates very well	Knows and understands problems of subordinates quite well	Has some knowledge and understanding of problems of subordinates	Has no knowledge or understanding of problems of subordinates	25.
(2) How accurate are the perceptions by superiors and subordinates of each other?	Often in error	Often in error on some points	Moderately accurate	Usually quite accurate	26
4. Character of interaction-influence process					
a. Amount and character of interaction	Extensive, friendly interaction with high degree of confidence and trust	Moderate interaction, often with fair amount of confidence and trust	Little interaction and usually with some condescension by superiors; fear and caution by subordinates	Little interaction and always with fear and distrust	27.
b. Amount of cooperative teamwork present	Very substantial amount throughout the organization	A moderate amount	Relatively little	None	28.
c. Extent to which subordinates can influence the goals, methods, and activity of their units and departments					
(1) As seen by superiors	None	Virtually none	Moderate amount	A great deal	29
(2) As seen by subordinates	None except through "informal organization" or via unionization	Little except through "informal organization" or via unionization	Moderate amount both directly and via unionization (where it exists)	Substantial amount both directly and via unionization (where it exists)	30
d. Amount of actual influence which superiors can exercise over the goals, activity, and methods of their units and departments	Believed to be substantial but actually moderate unless capacity to exercise severe punishment is present	Moderate to somewhat more than moderate, especially for higher levels in organization	Moderate to substantial, especially for higher levels in organization	Substantial but often done indirectly, as, for example, by superior building effective interaction-influence system	31

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
e. Extent to which an effective structure exists enabling one part of organization to exert influence upon other parts	Highly effective structure exists enabling exercise of influence in all directions	Moderately effective structure exists; influence exerted largely through vertical lines	Limited capacity exists; influence exerted largely via vertical lines and primarily downward	Effective structure virtually not present	32.
5. Character of decision-making process					
a. At what level in organization are decisions formally made?	Bulk of decisions at top of organization	Policy at top, many decisions within prescribed framework made at lower levels but usually checked with top before action	Broad policy decisions at top, more specific decisions at lower levels	Decision making widely done throughout organization, although well integrated through linking process provided by overlapping groups	33
b. How adequate and accurate is the information available for decision making at the place where decisions are made?	Information is generally inadequate and inaccurate	Information is often somewhat inadequate and inaccurate	Reasonably adequate and accurate information available	Relatively complete and accurate information available based both on measurements and efficient flow of information in organizations	34
c. To what extent are decision makers aware of problems, particularly those at lower levels in the organization?	Generally quite well aware of problems	Moderately aware of problems	Aware of some, unaware of others	Often are unaware or only partially aware	35.
d. Extent to which technical and professional knowledge is used in decision making	Used only if possessed at higher levels	Much of what is available in higher and middle levels is used	Much of what is available in higher, middle, and lower levels is used	Most of what is available anywhere within the organization is used	36
e. Are decisions made at the best level in the organization as far as					
(1) Availability of the most adequate information bearing on the decision	Overlapping groups and group decision processes tend to push decisions to point where information is most adequate or to pass the relevant information to the decision-making point	Some tendency for decisions to be made at higher levels than where most adequate and accurate information exists	Decisions often made at levels appreciably higher than levels where most adequate and accurate information exists	Decisions usually made at levels appreciably higher than levels where most adequate and accurate information exists	37.
(2) The motivational consequences (i.e., does the decision-making process help to create the necessary motivations in those persons who have to carry out the decisions)?	Substantial contribution by decision-making processes to motivation to implement	Some contribution by decision making to motivation to implement	Decision making contributes relatively little motivation	Decision making contributes little or nothing to the motivation to implement the decision, usually yields adverse motivation	38.

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
f. To what extent are subordinates involved in decisions related to their work?	Not at all	Never involved in decisions; occasionally consulted	Usually are consulted but ordinarily not involved in the decision making	Are involved fully in all decisions related to their work	39
g. Is decision making based on man-to-man or group pattern of operation? Does it encourage or discourage teamwork?	Man-to-man only, discourages teamwork	Man-to-man almost entirely, discourages teamwork	Both man-to-man and group, partially encourages teamwork	Largely based on group pattern, encourages teamwork	40
6. Character of goal setting or ordering					
a. Manner in which usually done	Except in emergencies, goals are usually established by means of group participation	Goals are set or orders issued after discussion with subordinates of problems and planned action	Orders issued, opportunity to comment may or may not exist	Orders issued	41.
b. To what extent do the different hierarchical levels tend to strive for high performance goals?	High goals sought by all levels, with lower levels sometimes pressing for higher goals than top levels	High goals sought by higher levels but with occasional resistance by lower levels	High goals sought by top and often resisted moderately by subordinates	High goals pressed by top, generally resisted by subordinates	42.
c. Are there forces to accept, resist, or reject goals?	Goals are overtly accepted but are covertly resisted strongly	Goals are overtly accepted but often covertly resisted to at least a moderate degree	Goals are overtly accepted but at times with some covert resistance	Goals are fully accepted both overtly and covertly	43
7. Character of control processes					
a. At what hierarchical levels in organization does major or primary concern exist with regard to the performance of the control function?	At the very top only	Primarily or largely at the top	Primarily at the top but some shared feeling of responsibility felt at middle and to a less extent at lower levels	Concern for performance of control functions likely to be felt throughout organization	44
b. How accurate are the measurements and information used to guide and perform the control function, and to what extent do forces exist in the organization to distort and falsify this information?	Strong pressures to obtain complete and accurate information to guide own behavior and behavior of own and related work groups; hence information and measurements tend to be complete and accurate	Some pressure to protect self and colleagues and hence some pressures to distort; information is only moderately complete and contains some inaccuracies	Fairly strong forces exist to distort and falsify; hence measurements and information are often incomplete and inaccurate	Very strong forces exist to distort and falsify; as a consequence, measurements and information are usually incomplete and often inaccurate	45.

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
c. Extent to which the review and control functions are concentrated	Highly concentrated in top management	Relatively highly concentrated, with some delegated control to middle and lower levels	Moderate downward delegation of review and control processes; lower as well as higher levels perform these tasks	Review and control done at all levels with lower units at times imposing more vigorous reviews and tighter controls than top management	46
d. Extent to which there is an informal organization present and supporting or opposing goals of formal organization	Informal organization present and opposing goals of formal organization	Informal organization usually present and partially resisting goals	Informal organization may be present and may either support or partially resist goals of formal organization	Informal and formal organization are one and the same; hence all social forces support efforts to achieve organization's goals	47
e. Extent to which control data (e.g., accounting, productivity, cost, etc.) are used for self-guidance or group problem solving by managers and non-supervisory employees, or used by superiors in a punitive, policing manner	Used for policing and in punitive manner	Used for policing coupled with reward and punishment, sometimes punitively; used somewhat for guidance but in accord with orders	Used for policing with emphasis usually on reward but with some punishment; used for guidance in accord with orders; some use also for self-guidance	Used for self-guidance and for coordinated problem solving and guidance; not used punitively	48
8. Performance goals and training					
a. Level of performance goals which superiors seek to have organization achieve	Seek to achieve extremely high goals	Seek very high goals	Seek high goals	Seek average goals	49.
b. Extent to which you have been given the kind of management training you desire	Have received no management training of kind I desire	Have received some management training of kind I desire	Have received quite a bit of management training of kind I desire	Have received a great deal of management training of kind I desire	50
c. Adequacy of training resources provided to assist you in training your subordinates	Training resources provided are excellent	Training resources provided are very good	Training resources provided are good	Training resources provided are only fairly good	51.

APPENDIX III

PROFILE OF ORGANIZATIONAL CHARACTERISTICS

FORM 0

This questionnaire was developed for describing the management system or style used in a company or one of its divisions.

In completing the questionnaire, it is important that each individual answer each question as thoughtfully and frankly as possible. This is not a test; there are no right or wrong answers. The important thing is that you answer each question the way you see things or the way you feel about them.

INSTRUCTIONS

On the line below each organizational variable place an X at the point which best describes what you now feel is most characteristic of an effective management system.

Organizational variable					Item no.
1. Leadership processes used					
a. Extent to which superiors have confidence and trust in subordinates	Have no confidence and trust in subordinates	Have condescending confidence and trust, such as master has in servant	Substantial but not complete confidence and trust; still wishes to keep control of decisions	Complete confidence and trust in all matters	
					1
b. Extent to which subordinates, in turn, have confidence and trust in superiors	Have no confidence and trust in superiors	Have subservient confidence and trust, such as servant has to master	Substantial but not complete confidence and trust	Complete confidence and trust	
					2
c. Extent to which immediate superior in solving job problems generally tries to get subordinates' ideas and opinions and make constructive use of them	Always gets ideas and opinions and always tries to make constructive use of them	Usually gets ideas and opinions and usually tries to make constructive use of them	Sometimes gets ideas and opinions of subordinates in solving job problems	Seldom gets ideas and opinions of subordinates in solving job problems	
					3
2. Character of motivational forces					
a. Manner in which motives are used	Fear, threats, punishment, and occasional rewards	Rewards and some actual or potential punishment	Rewards, occasional punishment, and some involvement	Economic rewards based on compensation system developed through participation; group participation and involvement in setting goals, improving methods, appraising progress toward goals, etc.	
					4
b. Extent to which motivational forces conflict with or reinforce one another	Marked conflict of forces substantially reducing those motivational forces leading to behavior in support of the organization's goals	Conflict often exists; occasionally forces will reinforce each other, at least partially	Some conflict, but often motivational forces will reinforce each other	Motivational forces generally reinforce each other in a substantial and cumulative manner	
					5

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PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
c. Attitudes toward other members of the organization	Favorable, cooperative attitudes throughout the organization with mutual trust and confidence	Cooperative, reasonably favorable attitudes toward others in organization; may be some competition between peers with resulting hostility and some condescension toward subordinates	Subservient attitudes toward superiors; competition for status resulting in hostility toward peers; condescension toward subordinates	Subservient attitudes toward superiors coupled with hostility; hostility toward peers and contempt for subordinates; distrust is widespread	6
<div>3. Character of communication</div>					
a. Amount of interaction and communication aimed at achieving organization's objectives	Very little	Little	Quite a bit	Much with both individuals and groups	7
b. Downward communication					
(1) Where initiated	Initiated at all levels	Patterned on communication from top but with some initiative at lower levels	Primarily at top or patterned on communication from top	At top of organization or to implement top directive	8
(2) Extent to which communications are accepted by subordinates	Generally accepted, but if not, openly and candidly questioned	Often accepted but, if not, may or may not be openly questioned	Some accepted and some viewed with suspicion	Viewed with great suspicion	9
c. Upward communication					
(1) Subordinates' feeling of responsibility for initiating accurate upward communication	None at all	Relatively little, usually communicates "filtered" information and only when requested; may "yes" the boss	Some to moderate degree of responsibility to initiate accurate upward communication	Considerable responsibility felt and much initiative; group communicates all relevant information	10
(2) Accuracy of upward communication via line	Accurate	Information that boss wants to hear flows; other information may be limited or cautiously given	Information that boss wants to hear flows; other information is restricted and filtered	Tends to be inaccurate	11
d. Sideward communication, its adequacy and accuracy	Usually poor because of competition between peers, corresponding hostility	Fairly poor because of competition between peers	Fair to good	Good to excellent	12

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
e. Psychological closeness of superiors to subordinates (i.e., friendliness between superiors and subordinates)					
(1) How well does superior know and understand problems faced by subordinates?	Knows and understands problems of subordinates very well	Knows and understands problems of subordinates quite well	Has some knowledge and understanding of problems of subordinates	Has no knowledge or understanding of problems of subordinates	13
4. Character of interaction-influence process					
a. Amount and character of interaction	Extensive, friendly interaction with high degree of confidence and trust	Moderate interaction often with fair amount of confidence and trust	Little interaction and usually with some condescension by superiors; fear and caution by subordinates	Little interaction and always with fear and distrust	14
b. Extent to which subordinates can influence the goals, methods, and activity of their units and departments					
(1) As seen by superiors	None	Virtually none	Moderate amount	A great deal	15
(2) As seen by subordinates	None except through "informal organization" or via unionization	Little except through "informal organization" or via unionization	Moderate amount both directly and via unionization (where it exists)	Substantial amount both directly and via unionization (where it exists)	16
5. Character of decision-making process					
a. To what extent are decisions made by superior or by group participation and consensus	By superiors (or higher levels) with no opportunity for comment	By superiors but with some opportunity for reaction by lower levels	By superiors but following discussion of problem	By group participation and usually with consensus	17
b. Extent to which technical and professional knowledge is used in decision making	Used only if possessed at higher levels	Much of what is available in higher and middle levels is used	Much of what is available in higher, middle, and lower levels is used	Most of what is available anywhere within the organization is used	18

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
c. Are decisions made at the best level in the organization as far as (1) Availability of the most adequate and accurate information bearing on the decision	Overlapping groups and group decision processes tend to push decisions to point where information is most adequate or to pass the relevant information to the decision-making point	Some tendency for decisions to be made at higher levels than where most adequate and accurate information exists	Decisions often made at levels appreciably higher than levels where most adequate and accurate information exists	Decisions usually made at levels appreciably higher than levels where most adequate and accurate information exists	19
d. Is decision making based on man-to-man or group pattern of operation? Does it encourage or discourage teamwork?	Man-to-man only, discourages teamwork	Man-to-man almost entirely, discourages teamwork	Both man-to-man and group, partially encourages teamwork	Largely based on group pattern, encourages teamwork	20
6. Character of goal setting or ordering					
a. Manner in which usually done	Except in emergencies, goals are usually established by means of group participation	Goals are set or orders issued after discussion with subordinates of problems and planned action	Orders issued, opportunity to comment may or may not exist	Orders issued	21
b. Are there forces to accept, resist, or reject goals?	Goals are overtly accepted but are covertly resisted strongly	Goals are overtly accepted but often covertly resisted to at least a moderate degree	Goals are overtly accepted but at times with some covert resistance	Goals are fully accepted both overtly and covertly	22
7. Character of control process					
a. How accurate are the measurements and information used to guide and preform the control function, and to what extent do forces exist in the organization to distort and falsify this information?	Strong pressures to obtain complete and accurate information to guide own behavior and behavior of own and related work groups; hence information and measurements tend to be complete and accurate	Some pressure to protect self and colleagues and hence some pressures to distort; information is only moderately complete and contains some inaccuracies	Fairly strong forces exist to distort and falsify; hence measurements and information are often incomplete and inaccurate	Very strong forces exist to distort and falsify; as a consequence, measurements and information are usually incomplete and often inaccurate	23
b. Extent to which there is an informal organization present and supporting or opposing goals of formal organization	Informal organization present and opposing goals of formal organization	Informal organization usually present and partially resisting goals	Informal organization may be present and may either support or partially resist goals of formal organization	Informal and formal organization are one and the same; hence all social forces support efforts to achieve organization's goals	24

APPENDIX IV

FORM E

PROFILE OF ORGANIZATIONAL CHARACTERISTICS

This questionnaire was developed for describing the management system or style used in a company or one of its divisions.

In completing the questionnaire, it is important that each individual answer each question as thoughtfully and frankly as possible. This is not a test; there are no right or wrong answers. The important thing is that you answer each question the way you see things or the way you feel about them.

INSTRUCTIONS

On the line below each organizational variable place an X at the point which best describes what you now feel is most characteristic of an effective management system.

Organizational variable					Item no.
1. Leadership processes used					
a. Extent to which superiors display supportive behavior toward others	Display no supportive behavior or virtually none	Display supportive behavior in condescending manner and situations only	Display supportive behavior quite generally	Display supportive behavior fully and in all situations	1
b. Extent to which superiors behave so that subordinates feel free to discuss important things about their jobs with their immediate superior	Subordinates feel completely free to discuss things about the job with their superior	Subordinates feel rather free to discuss things about the job with their superior	Subordinates do not feel very free to discuss things about the job with their superior	Subordinates do not feel at all free to discuss things about the job with their superior	2
2. Character of motivational forces					
a. Underlying motives tapped	Physical security, economic needs, and some use of the desire for status	Economic needs and moderate use of ego motives, e.g., desire for status, affiliation, and achievement	Economic needs and considerable use of ego and other major motives, e.g., desire for new experiences	Full use of economic, ego, and other major motives, as, for example, motivational forces arising from group goals	3
b. Kinds of attitudes developed toward organization and its goals	Attitudes are strongly favorable and provide powerful stimulation to behavior implementing organization's goals	Attitudes usually are favorable and support behavior implementing organization's goals	Attitudes are sometimes hostile and counter to organization's goals and are sometimes favorable to the organization's goals and support the behavior necessary to achieve them	Attitudes usually are hostile and counter to organization's goals	4
c. Amount of responsibility felt by each member of organization for achieving organization's goals	Personnel at all levels feel real responsibility for organization's goals and behave in ways to implement them	Substantial proportion of personnel, especially at higher levels, feel responsibility and generally behave in ways to achieve the organization's goals	Managerial personnel usually feel responsibility; rank and file usually feel relatively little responsibility for achieving organization's goals	High levels of management feel responsibility; lower levels feel less; rank and file feel little and often welcome opportunity to behave in ways to defeat organization's goals	5

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PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
d. Satisfaction derived	Relatively high satisfaction throughout the organization with regard to membership in the organization, supervision, and one's own achievements	Some dissatisfaction to moderately high satisfaction with regard to membership in the organization, supervision, and one's own achievements	Dissatisfaction to moderate satisfaction with regard to membership in the organization, supervision and one's own achievements	Usually dissatisfaction with membership in the organization, with supervision, and with one's own achievements	6
3. Character of communication process					
a. Direction of information flow	Downward	Mostly downward	Down and up	Down, up, and with peers	7
b. Downward communication					
(1) Extent to which superiors willingly share information with subordinates	Provide minimum of information	Gives subordinates only information superior feels they need	Gives information needed and answers most questions	Seeks to give subordinates all relevant information and all information they want	8
c. Upward communication					
(1) Adequacy of upward communication via line organization	Very little	Limited	Some	A great deal	9
(2) Forces leading to accurate or distorted upward information	Virtually no forces to distort and powerful forces to communicate accurately	Occasional forces to distort along with many forces to communicate accurately	Many forces to distort; also forces for honest communication	Powerful forces to distort information and deceive superiors	10
(3) Need for supplementary upward communication system	No need for any supplementary system	Slight need for supplementary system; suggestion systems may be used	Upward communication often supplemented by suggestion system and similar devices	Great need to supplement upward communication by spy system, suggestion system, and similar devices	11
d. Psychological closeness of superiors to subordinates (i.e., friendliness between superiors and subordinates)	Usually very close	Fairly close	Can be moderately close if proper roles are kept	Far apart	12
(1) How accurate are the perceptions by superiors and subordinates of each other?	Often in error	Often in error on some points	Moderately accurate	Usually quite accurate	13

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
4. Character of interaction-influence process					
a. Amount of cooperative teamwork present	Very substantial amount throughout the organization	A moderate amount	Relatively little	None	
					14
b. Amount of actual influence which superiors can exercise over the goals, activity, and methods of their units and departments	Believed to be substantial but actually moderate unless capacity to exercise severe punishment is present	Moderate to somewhat more than moderate, especially for higher levels in organization	Moderate to substantial especially for higher levels in organization	Substantial but often done indirectly, as, for example, by superior building effective interaction-influence system	
					15
c. Extent to which an effective structure exists enabling one part of organization to exert influence upon other parts	Highly effective structure exists enabling exercise of influence in all directions	Moderately effective structure exists; influence exerted largely through vertical lines	Limited capacity exists; influence exerted largely via vertical lines and primarily downward	Effective structure virtually not present	
					16
5. Character of decision-making process					
a. How adequate and accurate is the information available for decision making at the place where the decisions are made?	Information is generally inadequate and inaccurate	Information is often somewhat inadequate and inaccurate	Reasonably adequate and accurate information available	Relatively complete and accurate information available based both on measurements and efficient flow of information in organization	
					17
b. To what extent are decision makers aware of problems, particularly those at lower levels in the organization?	Generally quite well aware of problems	Moderately aware of problems	Aware of some, unaware of others	Often are unaware or only partially aware	
					18
c. Are decisions made at the best level in the organization as far as					
(1) The motivational consequences (i.e., does the decision-making process help to create the necessary motivations in those persons who have to carry out the decision?)	Substantial contribution by decision-making processes to motivation to implement	Some contribution by decision making to motivation to implement	Decision making contributes relatively little motivation	Decision making contributes little or nothing to the motivation to implement the decision, usually yields adverse motivation	
					19

PROFILE OF ORGANIZATIONAL CHARACTERISTICS (Continued)

Organizational variable					Item no.
d. To what extent are subordinates involved in decisions related to their work?	Not at all	Never involved in decisions; occasionally consulted	Usually are consulted but ordinarily not involved in the decision making	Are involved fully in all decisions related to their work	20
6. Character of goal setting or ordering					
a. To what extent do the different hierarchical levels tend to strive for high performance goals?	High goals sought by all levels, with lower levels sometimes pressing for higher goals than top levels	High goals sought by higher levels but with occasional resistance by lower levels	High goals sought by top and often resisted moderately by subordinates	High goals pressed by top, generally resisted by subordinates	21
7. Character of control processes					
a. At what hierarchical levels in organization does major or primary concern exist with regard to the performance of the control function?	At the very top only	Primarily or largely at the top	Primarily at the top but some shared feeling of responsibility felt at middle and to a lesser extent at lower levels	Concern for performance of control functions likely to be felt throughout organization	22
b. Extent to which the review and control functions are concentrated	Highly concentrated in top management	Relatively highly concentrated, with some delegated control to middle and lower levels	Moderate downward delegation of review and control processes; lower as well as higher levels perform these tasks	Review and control done at all levels with lower units at times imposing more vigorous reviews and tighter controls than top management	23
c. Extent to which control data (e.g., accounting, productivity, cost, etc.) are used for self-guidance or group problem solving by managers and non-supervisory employees, or used by superiors in a punitive, policing manner	Used for policing and in punitive manner	Used for policing coupled with reward and punishment, sometimes punitively used somewhat for guidance but in accord with others	Used for policing with emphasis usually on reward but with some punishment; used for guidance in accord with orders; some use also for self-guidance	Used for self-guidance and for coordinated problem solving and guidance; not used punitively	24

APPENDIX V

BUSINESS ORGANIZATION AND ADMINISTRATION 1969-1970

Course Outline

Texts: Organizational Behavior and The Practice of Management, Hampton, Summer & Webber; Scott, Foresman and Company

Systems Analysis in Organizational Behavior, J. A. Seiler; Irwin

Note: Passout material available to go with most of the films. (Some attached.)

October 2 SESSION 1

Housekeeping — books, assignments, attendance, assessment of students, etc.

NOTE RE MARKS: First term assignments 10%, mid-term examination 20%,
term paper 25%, final examination 45%.

Lecture on behavioral science approach to organization theory, background,
summary of various schools of thought, strong points and shortcomings.

Film (½ hour): Understanding Motivation, featuring Saul Gellerman.

Assignment for Session 2

Hampton: Ch. 1, The Manager and Behavioral Science
Ch. 2, Conceptual Foundations of Organizational Behavior
P. 118, The Competence and Power Motives, Gellerman

Case: The Dashman Company

October 9 SESSION 2

Discussion of Gellerman ideas.

Discussion of other material in assigned readings—short lecture(s) on
selected points.

Discussion of Dashman case.

Assignment for Session 3

Hampton: (five readings - pp. 27, 40, 52, 72, 82)
A Theory of Human Motivation: The Basic Needs, Maslow
Social Behavior as Exchange, Homans
An Interaction Approach to the Theory of Organization, Whyte
The Empirical Study of Bureaucratic Structure and Function, Blau
The Body Politic of the Corporation, Latham

P. 98 — Prepare for discussion Questions 3, 4 and 7

October 16 SESSION 3

Discuss assigned questions.

Lecture on the "systems" approach.

Assignment for Session 4

Seiler: Ch. 1, Systems and the Analysis of Functions

Hampton: Ch. 3, The Individual in the Organization: Psychological Factors
in Organizational Behavior

October 23 SESSION 4

Discuss and explain readings.

Lecture on human motivation and needs.

Film: The Self Motivated Achiever, McClelland

Discuss film.

Assignment for Session 5

Hampton: (five readings - pp. 122, 132, 138, 155, 162)

The Achievement Motive, McClelland

Theory X and Theory Y, McGregor

Personality and Organization, Argyris

Perception: From the Inside Looking Out, Leavitt

Selective Perception, Dearborn and Simon

October 30 SESSION 5

Film: Human Nature and Organization Realities, Argyris

Discuss film; tie in with the reading.

Lecture on Perception (tie in with Leavitt article; also there is a film available).

Assignment for Session 6

Seiler: Ch. 2, Sociotechnical Systems (including the case, Utility Power Company)

Hand in written report on Dashman Company Case.

November 6 SESSION 6

Explanatory lecture relating to the Seiler chapter on Sociotechnical Systems.

Discuss Utility Power Company.

Assignment for Session 7

Seiler: Ch. 3, Human Inputs (including the Braddock Company case)

November 13 SESSION 7

Lecture on obscure points in Ch. 3, Seiler.

Discuss Braddock case.

Assignment for Session 8

Seiler: Ch. 4, Behavior Reconsidered

P. 80, P. Papadopoulos and Company Case

November 20 SESSION 8

Explanatory lecture on Ch. 4, Seiler.

Discuss Papadopoulos case.

Assignment for Session 9

Hampton: Ch. 5, The Impact of Informal Organization: Social Factors in Organizational Behavior

(two readings - pp. 288, 307)

Banana Time—Job Satisfaction and Informal Interaction, Roy
Group Dynamics and the Individual, Cartwright and Lippitt

Seiler: P. 95, The Young Foreman

Hand in written report on Papadopoulos Company

November 27 SESSION 9

Lecture on group processes.

Discuss case, The Young Foreman.

Assignment for Session 10

Hampton: (four readings - pp. 320, 329, 333, 336)

Explaining Informal Work Groups in Complex Organizations: The
Case for Autonomy in Structure, Katz

Work Groups on the Assembly Line, Walker, Guest & Turner

Work Groups in a Semi-Automatic Steel Mill, Walker

The Interlocking of Official and Unofficial Reward, Dalton

P. 355 — Prepare for discussion Questions 2, 3 and 8.

December 4 SESSION 10

Lecture on roles and role expectations. Include material which will enlarge on points made in Hampton Ch. 5.

Discuss assigned questions.

Assignment for Session 11

Seiler: Ch. 5, Social Inputs, including preparation of case p. 114,
The Molding Unit

December 11 SESSION 11

Explanatory lecture on Seiler Ch. 5, Social Inputs.

Discuss case, The Molding Unit.

Assignment for Session 12

Hampton: Ch. 6, Conflict in the Organization: Interpersonal and Intergroup Factors in Organizational Behavior

(two readings - pp. 374, 385)

Frustration: The Roadblock, Leavitt

Conflicts Between Staff and Line Managerial Officers, Dalton

Seiler: Prepare for discussion The Third National City Bank, p. 117

January 8 SESSION 12

Lecture on conflict.

Discussion of Third National City Bank.

Assignment for Session 13

Prepare for mid-term examination.

January 15 SESSION 13

First hour — Mid-term examination.

Second hour — Film: Styles of Leadership

Assignment for Session 14

Hampton: (three readings - pp. 395, 412, 425)

Tactics of Lateral Relationship: The Purchasing Agent, Strauss
Innovation and Conflict in Industrial Engineering, Webber
Sources of Power of Lower Participants in Complex
Organizations, Mechanic

Seiler: Prepare for discussion The Harlow Company, P. 126

January 22 SESSION 14

Lecture on influence and authority.

Discuss The Harlow Company.

Assignment for Session 15

Hampton: Ch. 7, Political Behavior in Organizations

(four readings - pp. 447, 451, 467, 501)

Concerning Civil Government, Locke

The Theory of Authority, Barnard

Toward a Theory of Organizational Behavior, Presthus

How to Choose a Leadership Pattern, Tannenbaum and Schmidt

P. 491 — Prepare for discussion Questions 1 and 2.

January 29 SESSION 15

Discuss Questions 1 and 2, p. 491, Hampton.

Lecture on the effects of technology on organizations.

Assignment for Session 16

Seiler: Ch. 6, Technical Inputs, including preparation of the case
p. 144, The Tudor Corporation.

February 5 SESSION 16

Continue lecture on the effects of technology; provide explanation of Seiler chapter where required.

Discuss The Tudor Company case.

Assignment for Session 17

Hampton: Ch. 9, Influencing Behavior Through Political Action

(three readings - pp. 590, 600, 604)

Delegation, Newman, Summer and Warren

Authority, Discipline and Unity of Command, Fayol

Decentralization: A Managerial Philosophy, Cordiner

February 12 SESSION 17

Film: Breaking the Delegation Barrier.

Discussion on delegation and summarizing lecture.

Assignment for Session 18

Hampton: Ch. 4, The Impact of Formal Organization: Structural Factors in Organizational Behavior

(two readings - pp. 200, 215)

Organizations, March and Simon

The United States Department of State, Schlesinger

p. 271 — Prepare for discussion Questions 1, 5 and 6.

February 19 SESSION 18

Lecture on the development of bureaucracy and formal organizations.

Discuss assigned questions.

Assignment for Session 19

Hampton: (four readings - pp. 224, 245, 255, 261)

Bureaucracy and Bureaupathology, Thompson

Use and Misuse of Efficiency Controls, Jasinski

Dysfunctional Consequences of Performance Measurements, Ridgway

The Personality vs. Organization Theory, Strauss

Seiler: Prepare for discussion Specialty Chemical Company, p. 177

February 26 SESSION 19

Lecture on aspects of formal organizations.

Discuss Specialty Chemical Company case.

Assignment for Session 20

Seiler: Ch. 7, Organizational Inputs

Prepare for discussion Carter Steel Company, p. 182

March 5 SESSION 20

Lecture on aspects of formal organizations.

Discuss Carter Steel Company case.

Assignment for Session 21

Prepare and hand in term paper (12 to 20 pages). Student's choice of topics, e.g., Systems Theory and Organizations; Effective Leadership Styles; Introducing Change Into An Organization; Improving Employee Motivation.

Hampton: Reading, p. 138 -- Personality and Organization, Argyris

March 12 SESSION 21

Discuss assigned reading.

Lecture on co-ordinated approach to management. Setting objectives, reconciling conflict between human, technical and organizational inputs.

Assignment for Session 22

Hampton: Ch. 8, Managing and Changing Organizations by Direct Influence

(two readings - pp. 510, 518)

Management by Integration and Self Control, McGregor

The Headquarters Staff Man in the Role of a Consultant, Kolb

March 19 SESSION 22

Lecture on management development.

Film: What Can I Contribute?, Peter Drucker

Assignment for Session 23

Hampton: (three readings - pp. 525, 539, 555)

Management Development as a Process of Influence, Schein

Sensitivity Training for the Management Team,

Tannenbaum, Weschler and Massarik

Organizational Change, Katz and Kahn

P. 572 -- Prepare for discussion Questions 1, 2 and 5

March 26 SESSION 23

Discuss assigned questions.

Lecture on methods of influencing organizational change.

Film: Focus on Tomorrow, Peter Drucker

Assignment for Session 24

Hampton: Ch. 10, Managing and Changing Organizations by Modifying Structure

(two readings - pp. 661, 678--prepare to discuss this case in class)

Work Flow as the Basis of Organizational Design, Chapple and Sayles

Reorganizing in an Advertising Agency: A Case Study of a Decrease in Integration, Kover

April 2 SESSION 24

Lecture on organizational change.

Discussion of assigned readings.

Film: Staffing for Strength, Peter Drucker

Assignment for Session 25

Seiler: Ch. 8, Analysis and Action

P. 188 — Prepare for discussion Daniels Computer Company

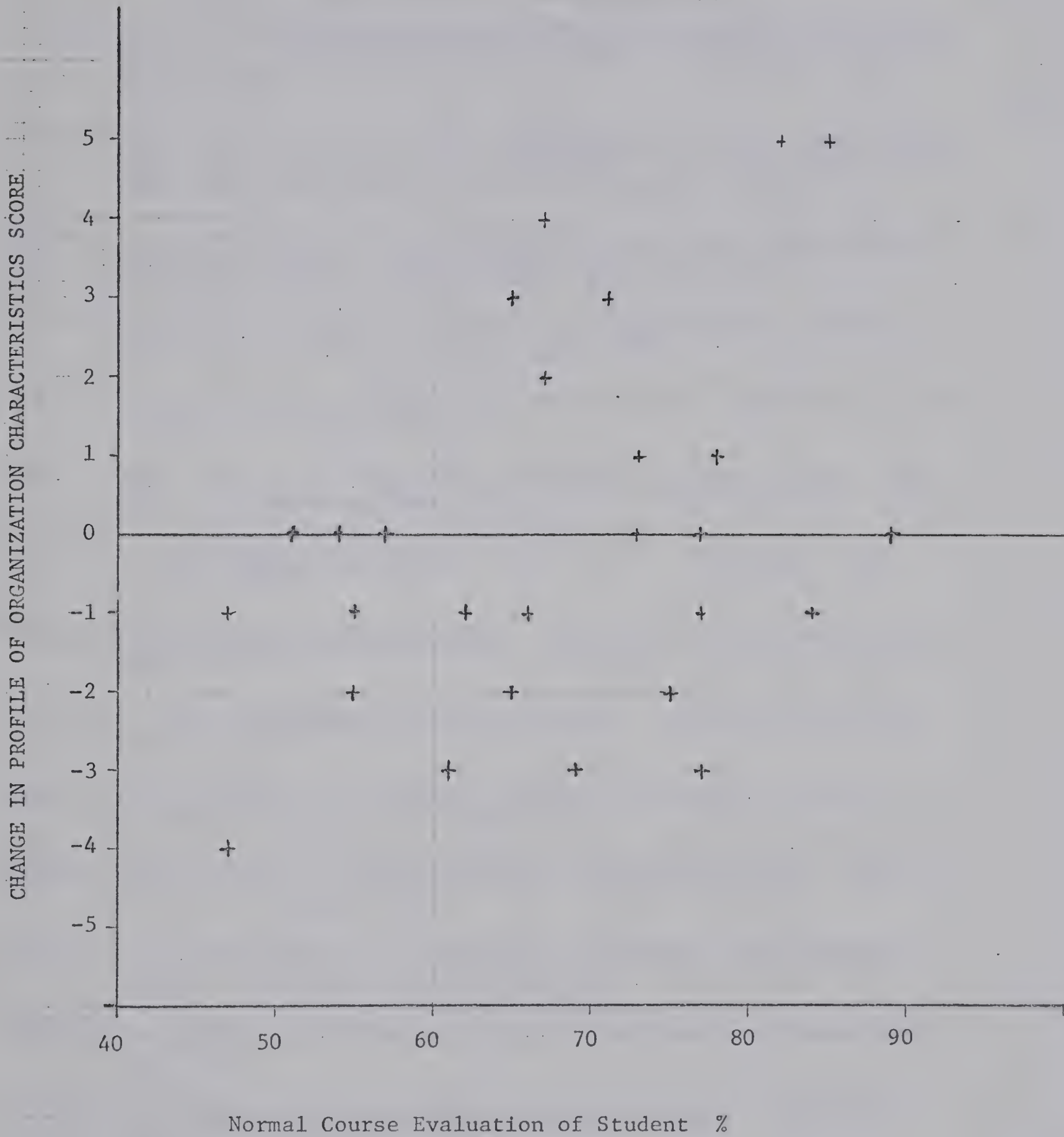
April 9 SESSION 25

Lecture reviewing the Seiler model.

Discuss Daniels Computer Company case.

Review for final examination.

APPENDIX VI

ATTITUDE CHANGE VS. KNOWLEDGE ACQUIRED
BUSINESS ORGANIZATION AND ADMINISTRATION IV

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